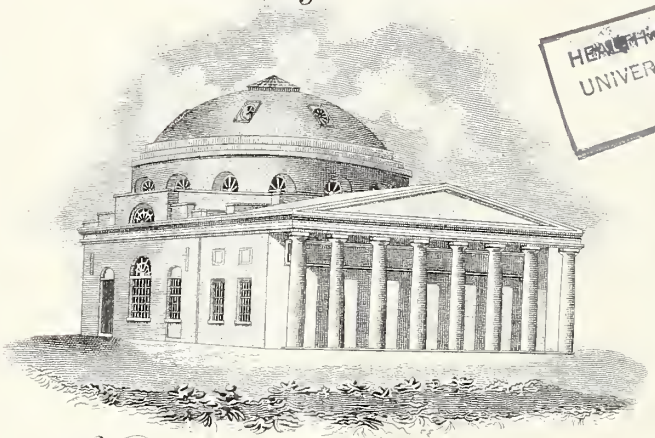
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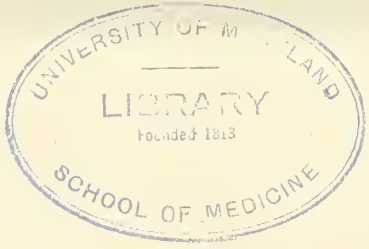


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DIAGNOSIS AND TREATMENT OF EARLY SYPHILIS*

FRANCIS E. SENEAR, M.D.

Chicago



Francis E. Senear, M.D.

In the history of no other disease has there been a more dramatic succession of events than that which occurred in syphilis. The discovery of the spirocheta pallida in 1905, the introduction of the Wassermann test in 1908, and the development of the organic arsenicals, all made available within a period of five years, served to amplify greatly the understanding of the clinical, laboratory, and therapeutic aspects of the disease. These discoveries and the further advances which have since been accomplished have made the diagnosis and treatment of syphilis a complex subject, and the best interest of the syphilitic can be served only if the physician has a thorough understanding of the many developments which have taken place in the field of antisyphilitic therapy. This seems to me to need particular emphasis in the present day. In the early days of the arsphenamine era, the treatment of syphilis fell largely to the lot of a comparatively small proportion of physicians, but with simplification of the treatment technic, and with an increasing experience on the part of the profession generally with the intravenous route for medication, antisyphilitic treatment has again been undertaken by nearly all physicians.

One of the developments which has occurred since the earlier use of the arsenicals is the recognition of the fact that the treatment of syphilis varies with the stage of the disease. It is only during the past decade that the need for a special treatment routine in early syphilis has been emphasized, but now it is generally conceded that the diagnosis and treatment of early syphilis is the most important factor in the fight against this disease.

EARLY DIAGNOSIS

In considering the early diagnosis of syphilis one must, first of all, realize that syphilis is a local disease but for a short time. The organisms spread to the lymph and blood vessels and viscera within a few days after inoculation, long before the appearance of the chancre; therefore, no method of treatment based on the assumption that syphilis can for a time be treated as a local disease will succeed. In spite of this fact, however, it is most important that the diagnosis be established and treatment instituted at the earliest possible date. At this early stage, although the organisms are scattered throughout the system, they are still in accessible positions, not protected by the fibrous tissue soon to be formed, and are much more readily destroyed by the spirocheticidal agents. As many writers have pointed out, the loss of a day, or even hours, in beginning treatment in the early days of infection, may modify greatly the prognosis and amount of treatment to be required in any given case.

The statistics of the Clinical Co-operative Group[1] support this observation strikingly. When treatment is instituted in the chancre stage before the serological reaction of the blood becomes positive, the curative outlook is about one-third better than when it is begun at a later date. Satisfactory results, regardless of the amount of treatment received, were obtained in 27.5 per cent of cases of sero-negative primary syphilis as contrasted with 18.4 per cent of such results in cases of secondary syphilis in the first year. Similarly, the better outlook when treatment is begun early is shown by their figures for the incidence of relapse and resistiveness, the proportion being 13.2 per cent in the sero-negative primary syphilitic group; 27 per cent in the sero-positive primary syphilis group; 27.8 in secondary syphilis (first year); and 40 per cent in delayed secondary syphilis.

Still more striking are the figures given by

* Presented before the general meeting of the Indiana State Medical Association at the South Bend session, October 8, 1936.

[1] *Ven. Dis. Inform.* 13:207:1932.

Stokes et al[2] in which it is shown that the proportion of "cures" is 71.4 per cent average and from 83 to 86 per cent best results when treatment is begun in the sero-negative primary stage, while if treatment is not begun until the blood test becomes positive only 53.3 per cent of "cures" by average and from 64 to 70 per cent by the best methods are secured, while if the disease has reached the secondary stage, "cure" is obtained in only 50.7 per cent by average and 61 to 82 per cent by the best methods. Thus diagnosis in the sero-negative stage offers from 18 to 21 per cent better outlook for cure than when the diagnosis is made even a short time later.

With regard to the incidence of fixed positive reactions, these occur in only 3.8 per cent cases when treatment is begun in the sero-negative stage, in 14.5 per cent when it is begun in the sero-positive stage, and in 13.3 per cent when it is begun in the early secondary stage.

Further, all studies show the prognosis of sero-positive primary syphilis is little better and in some respects poorer than that of fully developed secondary syphilis, so that an equal amount of treatment is required in both of these stages. It is readily apparent, then, that the interest of the patient demands diagnosis of syphilis before the serological reaction has become positive or secondary manifestations have become apparent, whenever this is possible. This is also of great importance from the standpoint of public health, as the period of infectiousness is greatly shortened when treatment is instituted early.

On the other hand, it is highly desirable that a definite diagnosis of syphilis be made in the chancre stage before treatment is administered. If the physician begins therapy simply because of the presence of a lesion which is clinically only suspicious, without laboratory confirmation, it is often impossible to establish a definite diagnosis at a later date, and both physician and patient are apt to be uncertain as to how long and how intensively treatment should be continued. With present day diagnostic methods, there is no need for such procedure. The demonstration of the spirochete in an uncomplicated and untreated chancre by means of dark field examination is usually easy. If, however, the lesion has been treated locally, or if there is an added infection, such as chancroidal or pyogenic types, it may be necessary to obtain serum from the depth of the lesion, and this can be obtained by scraping the lesion or by "needling" the base.

If the organism is not then found, there are three other procedures available. Micro-serological tests, requiring but a small amount of secretion from the lesion, have been developed and are often satisfactory. If the condition of the suspected lesion prevents demonstration of the parasite, gland puncture may be employed. For this purpose, the largest gland which is easy to puncture is held firmly and its substance pierced with the point of a needle attached to a hypodermic syringe. The point of the needle is then moved about to traumatize the gland substance after which traction on the piston of the syringe permits withdrawal of some of the macerated material. If none is obtained, 5 to 10 minims of sterile salt solution should be injected into the gland, after which one massages the gland about the needle for two to three minutes. After a wait of five to six minutes, the material is withdrawn and examined. The proportion of successful results from gland puncture varies greatly, depending upon the skill of the operator, but many authors have reported from 80 to 100 per cent of positive findings, and Photinos[3] recently was able to demonstrate the spirochete in the glands in 104 consecutive cases. It is of interest to note that Hoffman demonstrated the presence of the spirochete in the glands in 1905, the year in which he and Schaudinn discovered the causative organism of syphilis.

Lastly, if these methods fail, a portion of the primary lesion or one of the lymph glands may be excised and examined microscopically for the characteristic histopathological changes of syphilis.

In short, no effort should be spared to establish the diagnosis of chancre while it is still in the sero-negative stage, for this is, as Pusey has so aptly phrased it, the "golden opportunity" in the treatment of syphilis.

TREATMENT OF EARLY SYPHILIS

The term early syphilis refers to the disease in the first two years of its course, and it is to the disease in this stage that special attention has been given with regard to routinization of treatment, for individualization of therapy is more important in the later phases. In general, the methods of treatment may be classified in four groups: (1) continuous, (2) intermittent, (3) intensive, (4) irregular. In the first type no rest periods are permitted from beginning to end, while in the second, rest periods are provided at intervals. In the third type, short concentrated courses, aiming at radical cure, are employed, and in the fourth no plan whatever is followed. The radical or "abortive" methods held some favor for a time but have now been generally abandoned, as further experience has shown that the results obtained compare unfavorably with those of the first two systems. Irregular treatment has no place in present day antisyphilitic therapy, except in those cases where failure of the patient to co-operate makes any other plan impossible.

The choice of treatment routine may then be said to rest between the continuous and intermittent methods. Up until 1926 the intermittent method of treatment was the almost universal method of choice in this country. In this system arsphenamine and mercury or bismuth are used

[2] J. H. Stokes et al., *J. A. M. A.*—102:1267:1934.

[3] P. Photinos, *Ann. d mal. ven.*—31:481:1936.

simultaneously, and rest periods are necessary to avoid the cumulative toxic effects of the drugs and to prevent the development of "drug fastness" on the part of the organism.

It is well recognized that treatment begun early in the course of the disease interferes with the development of the patient's own resistance against the spirochete. In this situation the patient, unless radical cure is obtained by the first course of combined treatment, is less well equipped to combat the still active infection than if such interruption had not occurred, as evidenced by the development of early neuro-recurrence or other clinical manifestations. The rest periods of the intermittent period would, therefore, seem to give to the disease, with its well known tendency to rapid progression and relapse, an opportunity to strike against a poorly armed host. Moore and Keidel,[4] realizing these defects in the intermittent method, proposed in 1926 the use of the continuous method of treatment, a similar method having been employed earlier by Almkvist.[5] In this system, arsphenamine and a heavy metal are employed in alternation rather than simultaneously. In their opinion, the first course of arsphenamine alone accomplishes as much in the rapidity of healing of lesions, disappearance of organisms and effect on the blood serology as does the same amount of arsphenamine plus mercury. With the continuous method, with the completion of the first course of arsphenamine, when any remaining organisms have perhaps acquired some degree of arsenic tolerance, one shifts to the use of bismuth or mercury, with their supposed influence on the stimulation of the patient's own immune processes.

The original report of Moore and Kemp[6] showed, in the treatment of early syphilis, such favorable results that the continuous method of treatment was adopted by many syphilologists, and at present is probably the most widely used system. The Co-operative Clinical Group[1] have reported on a large number of cases treated by the different methods, and their results emphasize the advantages of the continuous method. Analyzing the results in 3,244 cases of early syphilis, they found "that continuous treatment, whether prolonged or brief, and practically regardless of the drugs used, is superior in its results to intermittent treatment. Continuous and intermittent treatment are in their turn both superior to so-called 'intensive' treatment; and irregular treatment stands out as inefficient, productive of relapse and progression, fixed positive serologic tests, and unsatisfactory treatment outcome." Their figures show that "satisfactory" results (the patient has been followed for two years or more and during one probationary year has had no symptoms of syphilis, the examination of the blood gives consistently negative results; the spinal fluid examination and physical examination have been negative, or the patient has had a re-infection) were obtained with 33 per cent of continuously treated cases, 21 per cent of intermittently treated cases, 13.3 per cent of irregularly treated cases and 4 per cent of intensively treated cases.

With regard to relapses they occurred in 13.3 per cent of those receiving continuous treatment, in 20.7 per cent of those under intermittent treatment, in 41.5 per cent of those under "intensive" treatment, and in 45.3 per cent under irregular treatment. As to the effect of treatment upon the serological reaction, it was found that in a period of treatment of one year, reversals were obtained with the continuous use of arsphenamine and a heavy metal in 81.8 per cent; with the intermittent use of drugs, reversals occurred in only 37.3 per cent and in only 4.7 per cent with irregular treatment.

These results, which have been paralleled in the experience of other observers, seem to indicate definitely a decided advantage to be gained by the use of the continuous method in the treatment of early syphilis. MacKee[7] in 1934 was still advocating the use of the intermittent method, with rest intervals of three weeks between the first and second courses in which arsphenamine and bismuth are used simultaneously and rest periods of approximately a month between succeeding courses. The League of Nations Investigation and Report on the Treatment of Early Syphilis in 1935 stated that the members of the Committee were unable to reach a clear decision as to the relative merits of intermittent and continuous treatment. Harrison[8] is of the opinion that the intermittent method is likewise practically continuous in its effect through the action of the drugs retained in the body during the rest periods. Nevertheless, as stated before, the vast majority of syphilologists in the United States feel that the continuous method is the one of choice.

CHOICE OF DRUGS

Practically all syphilologists agree that arsphenamine is the most effective of the arsenicals available, for the serological reaction is reversed more quickly when arsphenamine alone is used in treatment than when neoarsphenamine is employed, although when the arsenicals are used in combination with heavy metals there is little difference in the results in this respect at the end of one year's treatment, although fixed positive serologic reactions are encountered more frequently with the use of neoarsphenamine.

The Co-operative Clinical Studies[9] state that from the clinical standpoint the efficiency ratio of arsphenamine as compared with neoarsphenamine is one and one-half to one of satisfactory

[4] J. E. Moore, A. Keidel, *Bull. Johns Hopkins Hosp.*—39:1:1926.

[5] J. Almkvist, *Acta Dermat. Venereol.*—1:97:1920.

[6] J. E. Moore, J. E. Kemp, *Bull. Johns Hopkins Hosp.*—39:16:1926.

[7] G. M. MacKee, *New York State J. Med.*—34:293:1934.

[8] L. W. Harrisno, *Bril. J. VeVn. Dis.*—11:69:1935.

[9] *Ven. Dis. Inform.* 13:253:1932.

results under continuous treatment, while under intermittent treatment the advantage of arsphenamine is less pronounced, and in irregular treatment there seems to be relatively little choice.

In view of the comparatively favorable results obtained by means of treatment employing neoarsphenamine, and because of the greater ease of administration and lesser danger of technical error in its preparation, the use of this drug is justified in the treatment of early syphilis generally.

Various other forms of arsenicals have been introduced from time to time. Sulpharsphenamine, because of its availability for intramuscular injection, enjoyed a considerable popularity for a short period, but a high incidence of untoward reactions soon placed it in an unfavorable light. Dermatitis, hemorrhagic encephalitis and purpuric reactions are seen much more frequently following its use than is the case with other forms of arsphenamine. When an arsenical other than old or neo-arsphenamine is required, silver arsphenamine is an efficient agent, but the development of argyria is a possibility if too large a total dosage is used. Bismarsen, a combination of bismuth and arsphenamine, may be used when the intramuscular route must be employed, but O'Leary[10] has pointed out that it is not as efficient as the older arsenicals in the treatment of early syphilis, and should be employed in this stage of the disease only in exceptional instances. Recently another trivalent arsenical, mapharsen (meta-amino-para-hydroxphenyl arsine oxide) has been given a clinical trial, and the preliminary report by Foerster and others indicates that this drug is one of low toxicity, and that the clinical results are at least equal to those obtained with other arsphenamines. Prolonged observation of its ultimate effects will be necessary before a decision can be reached as to the advisability of replacing the arsphenamines with this agent.

When the use of bismuth was first introduced in the therapy of syphilis, there was considerable enthusiasm for its use in replacement of the arsphenamines. In France this plan was followed rather extensively, but it soon became apparent, largely through an admitted increase in the incidence of syphilis, that the use of the arsphenamines was still essential. Consequently, bismuth took its place as an adjunct only in antisyphilitic therapy, and in a short time had largely replaced mercury. It is generally assumed that bismuth is the more effective of the two drugs, but again referring to the Co-operative Studies,[11] we find that within the first three months of treatment the percentage of patients securing Wassermann reversal is practically identical with both bismuth and mercury, whether used with arsphenamine or neo-arsphenamine. With treatment extending over four to twelve months, bismuth appeared to have a distinct advantage over mercury. They conclude, however, on the basis of a detailed analysis, that when the heavy metals are given continuously in alternation with an arsphenamine, the serologic outcome for the two drugs is approximately the same, but with the intermittent or irregular types of procedure, there appears to be an advantage for bismuth over mercury in the percentage of cases securing serological reversals in the first year and in a lower proportion of delayed reversals and Wassermann fastness. They conclude that there may be a slight advantage from the serologic standpoint for bismuth over mercury, especially if treatment be given by any but the continuous method.

Cannon[12] studied the comparative results obtained at the Vanderbilt Clinic with various preparations of both bismuth and mercury used in conjunction with arsenicals in the treatment of 379 cases of syphilis and found that neither drug appeared to have a decided advantage over the other. He found that the spirochetes disappeared from the primary lesion and that the lesion itself healed more rapidly with bismuth than with mercury, but that a positive Wassermann reaction in the primary stage reversed earlier under mercury, while in the secondary stage the reverse was true with both of these findings. At the end of a year of treatment, he obtained more satisfactory outcomes with the use of mercury than with that of bismuth. Where complications were assumed to be due to the use of a heavy metal alone, he encountered only one-half as many unfavorable reactions with bismuth as with mercury. He feels that mercury gives more brilliant but less uniform results than bismuth, and that in a robust person with a healthy excretory mechanism the body's natural defenses are stimulated perhaps more effectively by mercury while bismuth may be used for those less vigorous patients and for those who do not respond well to mercury.

A number of authors recommend the alternating employment of bismuth and mercury in the successive courses, as this makes use of any advantages which either may possess over the other and lessens the possibility of toxic reactions and drug fastness.

Of the mercurials employed in the treatment of syphilis we have available for more frequent injections the soluble salts, such as the bichloride or succinamide, and the insoluble salts, of these latter the salicylates being almost universally used in this country. The preparations of bismuth are very numerous, and both soluble and insoluble forms may be secured. The soluble preparations are regarded as less desirable than the insoluble, particularly if they cannot be given at shorter intervals. Of the insoluble salts suspensions in oil, such as sodium potassium bismuth tartrate or bismuth salicylate, and solutions in oil, such as the campho-carboxylate, are most favored.

[10] P. A. O'Leary, *Arch. Dermat. & Syph.*—23:624: 1931.

[11] O. H. Foerster et al., *Arch. Dermat. & Syph.*—32:868: 1935.

[12] A. B. Cannon, *J. A. M. A.*—106:2133: 1936.

METHOD OF USE OF DRUGS IN CONTINUOUS TREATMENT

In the continuous system the treatment is begun with injections of arsphenamine on the first, fifth and tenth days, and at weekly intervals until eight injections have been given. For the next four weeks bismuth is given once weekly, followed in turn by six more injections of arsphenamine at weekly intervals, and these in turn by six injections of bismuth at weekly intervals. A third course of six injections of the arsenical follows, and then eight injections of bismuth. A fourth course of six injections of arsphenamine is in turn succeeded by ten injections of bismuth, with a fifth course of similar length for each of the two drugs. Potassium iodide is prescribed for oral use with each course of treatment during the period in which bismuth is being administered. A modification of this method preferred by some provides for longer courses of the arsenicals, ten to twelve injections being given in each course. When this is done the courses of heavy metal overlap at the beginning and end with the arsphenamine injections.

In cases of sero-negative primary syphilis, treatment may be suspended at the end of the fourth course of treatment if the blood Wassermann has always been negative, while the case of sero-positive primary or early secondary syphilis should receive at least the full five courses.

More treatment than that outlined may be required, as with this method as with earlier ones it is felt that treatment with heavy metal should be continued at least for one year after all symptoms and signs of the disease have disappeared.

Serological tests should be made at the beginning and end of each arsphenamine course in order to determine the point from which the time of cessation of treatment is to be measured.

The spinal fluid should be examined not later than the sixth month of treatment. Some writers suggest that the first examination be made at an earlier date (after the third injection of arsphenamine), while others recommend waiting until the end of the first year of treatment. Positive findings indicate the necessity for subsequent examinations, the number and frequency depending upon the degree of the positive laboratory findings. Even if the results are negative, the tests should be made again if the blood serology reverses to positive while treatment is being continued, or if the patient has neglected treatment. In any event, it is advisable to repeat the examination at the end of treatment, before the patient is placed on observation.

AMOUNT OF TREATMENT

All statistics show that, within certain limits, the proportion of satisfactory results secured in the therapy of syphilis varies directly with the amount of treatment used. For example, in the studies mentioned before,[2] it was found that the good end results secured by prolonging continuous treatment more than a year were more than double those obtained by the same kind of treatment carried through less than a year. It was also noted that a little treatment continuously given is more than twice as effective as when intermittently applied and more than four times as effective as when given irregularly.

It was found that among these patients who had been under observation or treatment for two years that the largest number of patients obtaining satisfactory results had received from 20 to 29 injections of arsphenamine and a similar amount of heavy metal. Any number of injections of arsphenamine less than twenty greatly increases the possibility of clinical and serologic relapse and offers much less protection against the serious late sequalae of the disease. On the other hand, the present day tendency is to employ a lower maximum number of injections of arsphenamine in early syphilis than was formerly the case, and thirty injections has been suggested.

The importance of the necessity for prolonged treatment in early syphilis should be recognized by every physician, for upon the profession rests the responsibility of exerting every means to insure the continuance of treatment by the patient. Stress should be laid upon the lack of significance of an early reversal of the serologic reaction as necessarily an indication of the favorable future course of the disease, for often the patient ceases treatment or thereafter reports irregularly when too greatly encouraged by such a report. The dangers of the use of small amounts of arsenic are shown by the fact that 64 per cent of patients who had received from 1 to 4 injections of arsphenamine had an infectious relapse, while only 14 per cent of those patients who received 5 to 9 such injections suffered similarly. Further, relapse involving the central nervous system occurred three times as frequently among those patients who had received less than twenty injections of arsenic as was the case with those who had received more.

RESULTS OF TREATMENT

Moore[13] stated in 1929 "that the best treatment of paresis, tabes, cardio-vascular and visceral syphilis is not the treatment of these conditions, but is their prevention by means of the treatment of early syphilis. It is hardly too much to say that, given a cooperative patient, the development of late syphilis is the direct responsibility of the physician who treated the patient first."

Stokes found that satisfactory results were obtained in 86.4 per cent of patients with sero-negative primary syphilis who received continuous treatment, while 64.3 per cent of patients with sero-positive primary syphilis had a similar result. In patients with secondary syphilis, the proportion of such results rose to 81.5 per cent.

In sero-positive primary syphilis the end results were slightly better with intermittent treatment than with continuous, probably due to the fact that the rest periods in the former method allow a revival of the organisms, and a new, if brief, stimulus to systemic reaction.

[13] J. E. Moore, *Ven. Dis. Inform.* 10:53:1929.

It is obvious from these figures that we still fall short of perfect results in the treatment of early syphilis even with the best methods and with cooperative patients. This is due in part to the individual variations in resistance to the disease. The effects of the development of immunity and the possibility of spontaneous cure are well demonstrated by the observation in the clinic at Oslo. In the period from 1891 to 1910, as the treatment with mercury and potassium iodid was there considered of little or no value, 2,181 patients with early syphilis were seen, and no treatment was administered for their infections. Fifteen years later Bruusgaard[14] re-examined 309 of this number, and discovered the cause of death in 164 others. In this group neuro-syphilis developed in 91.5 per cent, cardiovascular syphilis in 12.2 per cent, latent syphilis in 14.1 per cent, spontaneous cure in 27.9 per cent, and death resulted from syphilis other than of the cardiovascular or central nervous systems in 0.8 per cent, and from other causes in 22.6 per cent. Over 25 per cent of the patients made a spontaneous recovery and approximately 64 per cent were individually unharmed by the disease. Striking as these figures are, they point out, nevertheless, that any type of treatment improves the prognosis of the disease.

These figures also demonstrate the inability of some patients to offer an immunity mechanism to syphilitic infection equal to that met with in others, and in occasional instances the lack of a tendency to the development of resistance is striking. Brown and Pearce[15] have shown in a laboratory study of syphilis in rabbits that these animals present resistance of high, low and intermediate degree, and that these varying degrees of resistance occur in the proportion of 1:1:3. While direct deductions cannot be drawn for syphilis in the human, clinical experience teaches us that the same variability occurs in man, as we occasionally see patients who, although seen even in the seronegative primary stage and intensively treated, develop at a later date, and even while under treatment, serologic or clinical relapse. In such cases the usually employed drugs may be inadequate, and it may become necessary to stimulate the patient's immunity mechanism by means of fever therapy or other agents.

SEROLOGY

In addition to a thorough knowledge of the principles of treatment, the physician should be informed upon certain aspects of the interpretation of the serologic phases of the disease. The blood serology is not commonly positive before the chancre has been present for at least two weeks, the proportion of positive results increasing rapidly thereafter. It is almost needless to say that no importance should be attached to the negative reaction in the primary stage as ruling out the diagnosis of syphilis. On the contrary, every effort should be made to establish the diagnosis by other means at the earliest possible date. In the secondary stage, on the other hand, a reliable test properly performed gives a positive result in practically every case. In the recent evaluation[16] by the Committee on Sero-diagnostic Tests for Syphilis appointed by the United States Public Health Service of the thirteen participating serologists, nearly all reported positive results in each of 65 untreated patients with secondary syphilis. Three of the participants reported a single negative each, two in the same case, and the third in another. Two of the failures were obtained, however, with tests which throughout the evaluation study showed a low degree of sensitivity. This finding indicates the need of caution in making a diagnosis of early secondary syphilis in an untreated patient who presents a negative serologic reaction.

One of the most important uses of the serologic test in syphilis is its application as a measure of the response to treatment and as a guide to the amount of treatment to be given. The evaluation study mentioned above showed that all of the diagnostic tests commonly used in this field had a high degree of specificity when performed by those who had developed new or modified previously existing tests. Their results in testing samples from 415 patients showed only minor variation, the percentage of sensitivity with five of the participants varying from 75.9 to 86.6. The cases in this group included patients with all stages of syphilis, but these figures indicate that, even with the best tests, diagnosis or need for further treatment might be established in approximately ten per cent of cases with the test giving the best results which would be missed with the test giving the smallest proportion of positive findings. This indicates the advisability of employing at least two tests on every specimen of blood, either in establishing a diagnosis or in control of treatment. Some authorities prefer the use of one complement fixation and one flocculation test, but the results of this study indicated that it is immaterial whether two complement fixation tests, two flocculation tests, or a combination of one complement fixation test and one flocculation test are selected.

It should also be recognized that a test which gives a high percentage of accurate results when employed in the laboratory of its originator may not be as reliable in the hands of other serologists as a test which, also in the hands of its originator, gives a slightly less favorable result but which can be more accurately performed by serologists generally. At present the same committee is attempting to evaluate the various outstanding tests in this respect by having a group of state, municipal, hospital and private labora-

[14] Bruusgaard, *Archiv fur dermat. u. syph.*—157:309:1929.
[15] W. H. Brown & L. Pearce, *Ann. of Clin. Med.*—3:1:1924.
[16] Supplement No. 1 to *Ven. Dis. Inform.* 1935.

tories examine specimens of blood in parallel with the originators of the test or tests which the laboratories mentioned employ.

Lastly, the selection of a reliable laboratory for the performance of sero-diagnostic tests is very important, as many of the statistics quoted above point out the danger of too early cessation of treatment, and the duration of therapy will in large part be determined by the sensitivity of the serologic tests as performed by individual laboratories.

SUMMARY AND CONCLUSIONS

1. The diagnosis and institution of treatment at the earliest possible moment is essential in early syphilis in order to (a) secure the greatest proportion of cures, (b) reduce the proportion of relapses and serious late manifestations, (c) afford the maximum of protection from the public health standpoint.

2. Diagnosis in the primary stage should definitely be established by dark field examination or other means before the institution of treatment.

3. The continuous method of treatment is recommended for the treatment of early syphilis on the basis of studies demonstrating the improved prognosis under this method.

4. While arsphenamine is the most effective of the arsenicals used, other considerations account for the more widespread use of neo-arsphenamine.

5. There is no unanimity of opinion on the comparative merits of bismuth and mercury as an adjunct to the arsenicals in the treatment of syphilis but the balance of authority gives bismuth the position of choice.

6. The notably higher proportion of satisfactory results obtained with large amounts of treatment (at least 20 injections of arsphenamine and 20 injections of a heavy metal) emphasize the dangers of insufficient treatment of early syphilis.

7. Examination of the spinal fluid is a requisite in the care of a patient with early syphilis.

8. A high proportion of satisfactory results is obtained with the best modern methods of treatment.

9. Familiarity with the clinical application of the results of sero-diagnostic tests is essential.

YOU

ARE INVITED TO

ATTEND THE

SECRETARIES' CONFERENCE.

SEE PAGE 35.

DIABETES MELLITUS AS A COMPARATIVELY SIMPLE CLINICAL PROBLEM*

B. M. EDLAVITCH, M.D.

Fort Wayne

In the past fifteen years clinicians have learned how to manage diabetes mellitus so successfully that this condition, when it is uncomplicated, has become one of the comparatively easy clinical problems. It can be easily recognized; the correct diagnosis can be made promptly; and the treatment, when properly carried out, gives results as concrete and as brilliant as the clinician is able to obtain in relatively few diseases of equal seriousness.

Is it not surprising that we can manage diabetes so well although we do not know exactly the underlying cause? We do know that the special islets in the pancreas, first identified by Langerhans and named after him, suffer impairment of function, so that they fail in part, or in toto, to supply their secretion, insulin. This loss of function may occur without any demonstrable pathological change in those tissues. Why this disturbance occurs is not definitely known. More and more is the view gaining ground that secretions from the anterior pituitary, the thyroid, the adrenals, and perhaps other internal secretions, are concerned with maintaining the functional integrity of the islands of Langerhans. Any degree of imbalance in such an endocrine coordination may—and probably does—determine the onset of this disease. Exact knowledge, however, is as yet too meager to permit of any definite conclusion as to the actual cause.

In view of what we know about diabetes, it should not be necessary to point out that the finding of sugar in the urine does not per se justify a diagnosis of diabetes mellitus. Nevertheless, this simple, important statement needs to be constantly emphasized. With the glycosuria an increased blood sugar content, or hyperglycemia, must be found. Then, and not until then, is the diagnosis tenable.

In the management of diabetes the basic problem is to supply the diabetic with the proper diet. Here we have an exquisite illustration that what may be food for one may be poison for another. The diabetic should not eat just like the non-diabetic, but he is just as human. He wants, needs, and should have not only enough to eat but a variety large enough to satisfy his craving. Over a long period he will be dissatisfied with less, and then he will not cooperate. Carbohydrates should be restricted, but a maintenance diet must be supplied. Not only must enough calories be given, but there must be a fairly wide variety of food, includ-

* Read before the Medical Section of the Indiana State Medical Association at South Bend, Indiana, October 7, 1936.

ing the essential vitamins. If the diabetes is mild or not too severe, it can be controlled by diet alone. This applies to most cases in which the disease starts in the latter half of life. If the diabetes is severe, as it is almost invariably in the first half of life and in the minority of those in the latter half, carbohydrate tolerance is so low that a maintenance diet can not be supplied without the use of insulin.

In the management of diabetes the patient must be made to understand just what his difficulty is, and how he can best help to control it. He must be taught what and how much to eat, and what not to eat; he must be shown how to examine his urine for sugar; and, if he should need insulin, he must be taught how, and how much, to inject. This is the sine qua non in the successful control of this trouble. The diabetic who has learned how to take care of himself properly and who does his part faithfully can maintain himself in uniformly good condition. The outlook for him is at least as good, if not better, than the outlook for the non-diabetic of the same age.

The complications occurring in diabetes are invariably the penalties accruing from neglect or mismanagement. So long as the condition is kept under complete control, any one of the many complications may be averted. When complications such as skin infections, pre-comatose and comatose states occur, trouble has been brewing for some time. The patient has been having hyperglycemia and glycosuria over too long a period, and it was serious error to have permitted that condition. The clinician who insists on his diabetics reporting in person at frequent intervals to enable him to keep track of the exact status of each will do his part in insuring them against the danger of preventable complications.

The onset of a complication brings with it an element of danger to the diabetic. Unless the situation is taken in hand and brought under control without unnecessary delay, the tendency is for it to become progressively worse. Delay in recognizing the real seriousness of the case and in starting aggressive treatment is fraught with too much danger. A variety of complications may be encountered. Some are worse and more serious than others, the menace to the life of the patient varying accordingly. The greatest menaces, of course, are pre-comatose and comatose states. But even coma, critical as it is, and it is one of the most dangerous crises the clinician is confronted with, need not be so hopeless as it was before insulin. Since the introduction of insulin, Banting's brilliant contribution to practical medicine, diabetic coma does not present the terror it did in pre-insulin years. The judicious use of insulin, if not too late, makes it possible to pull through many a diabetic in coma who could not survive without its help.

No hard and fast rule can be given for or followed in the giving of insulin in coma. Blood sugar estimations frequently made are of inestimable help, but in private practice and in relatively small hospitals with no large technical staff, they can not be had as often as desired. The urine, however, can serve as a safely reliable guide in determining the continued need for insulin and even in gauging the approximate dose of it. The urine may have to be obtained by catheter at times, but it can be gotten and tested, making it unnecessary and unjustified to work in the dark. Insufficient insulin used in diabetic coma will result in tragic defeat; too much insulin will lead to hypoglycemia and insulin shock. Coma ensuing from either cause, hyper or hypo-glycemia, if severe enough, may terminate fatally. The risk is too great to continue giving insulin without knowing right along the exact status of the unconscious patient. Having this essential information and knowing how to use insulin properly, the clinician is adequately prepared to meet this emergency and to offer a much more favorable prognosis in diabetic coma than formerly.

The diabetic is not a bad risk medically, but he is not a good risk surgically. He should be guarded against any operative treatment, no matter how minor it may be. Any procedure necessitating trauma, even so simple a matter as extraction of a tooth or teeth, in a diabetic is of relatively major importance. The safe view to hold is that no surgical attack of any sort is to be undertaken on the diabetic unless it is strictly unavoidable. Even the attempt to benefit the diabetic by denervation of the adrenals, which is quite a major affair, entails too much danger for the clinician to recommend it. The case reported recently by Rogoff[1] of the young diabetic of twenty-five who developed Addison's disease after a bilateral adrenal denervation in the attempt to cure the diabetes, was seen by me in May, 1935, and again a few months later, just before the young victim expired from his Addisonian syndrome. After watching the tragic course in that case, and realizing at present that had that boy just continued his insulin until now, when he most likely could have been stabilized with one large dose of insulin-protamine a day, one feels justified in emphasizing Rogoff's warning that "surgical intervention with the adrenals" particularly in diabetes mellitus, "is to be deprecated." A good slogan to bear in mind would be: "Surgical hands off the diabetic as much as possible."

When surgery is absolutely unavoidable and the diabetic must submit to operative treatment, his diabetic condition must be watched very carefully by one qualified and competent to manage that phase of the case. A major problem, medical as well as surgical, is involved here. If the operator is not fully prepared to carry out the proper man-

[1] Rogoff, J. M.: Addison's Disease Following Adrenal Denervation in a Case of Diabetes Mellitus, *J. A. M. A.*, 106:279 (Jan. 25), 1936.

agement of the diabetes, he should no more consider going ahead with that than the internist would think of himself performing the operation. The patient should be offered no less than such co-operative team-work.

Those of us who were treating diabetes in the years before insulin appreciate how invaluable that remedy really is. It is the only known therapeutic agent of real value in the treatment. In the mild or moderate cases it is not needed, except now and then to clear up glycosuria resulting usually from improper diet. Only in the severe cases must it be given regularly, for in severe diabetes the patient can not be fed properly without its help. Insulin has been available for over thirteen years, so that clinicians are, or should be, thoroughly experienced in the handling of it.

PROTAMINE INSULINATE

Recently reports on the use of a new insulin preparation have been appearing in both the medical and lay press. Hagedorn[2] and his associates, of Copenhagen, developed a compound of insulin with a mono-protamine derived from the ripe sperm of fish, and reported on their experience, chemical and clinical, with this new insulin protamine. Following this report in the same journal is one by a group[3] from what is referred to as the "Joslin Clinic" on their clinical experience with the new insulin. Soon followed a report by Wilder[4] and his associates on the experience with it at the Mayo Clinic. From Toronto, Kerr, Best and their co-workers[5] reported on their experience with it in twenty-five cases. Winnett[6] in his recent contribution reports a few cases he treated with insulin protamine. Allen[7] calls attention to "some difficulties arising in the use of protamine insulinate." Freund and Adler[8] in their very recent report point out the comparative effects of regular insulin, protamine insulin, and crystalline insulin. From Montreal, Rabinowitch[9] reported first his observations on the use of insulin protamine with the special diet he advocates, and last month he and his associates[10] recorded their experience with protamine-zinc-insulin and other mixtures of zinc and insulin. No doubt other reports already have appeared, and more may be expected with the increase in the use of this or other new insulin preparations.

All reports agree that insulin protamine—or insulin P as it is designated—is more slowly absorbed than regular insulin, which is being referred to now as insulin R. Therefore the effect of insulin P is more continuous, lasting many, instead of very few, hours. Insulin P also seems to be more potent, its effect being rated as 1¼ to 1⅓ that of insulin R. Rabinowitch[10] claims and Peck[11] states that the addition of zinc to the insulin with protamine gives an even greater and more striking effect in reducing hyperglycemia. Perhaps it will not be long until the insulin compound of maximum efficacy in controlling diabetes mellitus will be developed and available for general use.

Another decided advantage of insulin P is that even after large doses insulin shock hardly ever occurs. In view of this fact the daily requirement of insulin—even though comparatively large—may be given in one injection. Accordingly, multiple daily injections of insulin in most cases—if not in all—may soon be a thing of the past.

CASE REPORTS

Through the courtesy of Eli Lilly & Company, a supply of insulin protamine for clinical trial has been had during the past four months, so that a preliminary report on the clinical experience with it in ten cases of diabetes mellitus can now be presented.

Case I. A girl, age 17, has had diabetes 3½ years, and has been under treatment since January, 1934. She was taking 22 units of insulin R each morning and about 20 units later in the day. She was doing rather well on this dosage, but not well enough. Larger single doses could not be given, because reactions invariably followed. Late in June she was started on insulin P, is taking at present 46 units at one time each morning, with much better control of the glycosuria than formerly.

Case II. A woman, age 60, who has had diabetes 16 years, was giving herself 30 units of insulin R once daily. Although this did not keep her condition under control she refused to take two injections daily, and the one dose could not be increased because this was the maximum she could tolerate without shock. In June she showed a beginning diabetic ulcer of a toe. Promptly she was started on insulin P, is stabilized now on 30 units, in one dose, each morning. The ulcer healed in a few days, she is uniformly sugar free, and in much better condition than previously.

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[2] Hagedorn, H. C.; Jensen, B. N.; Krarup, N. B., and Wodstrup, I.: Protamine Insulinate, *J. A. M. A.*, 106:177 (Jan. 18), 1936.

[3] Root, H. F.; White, P.; Marble, A., and Stotz, E. H.: Clinical Experience with Protamine Insulinate, *J. A. M. A.*, 106:180 (Jan. 18), 1936.

[4] Sprague, R. G.; Blum, B. B.; Osterberg, A. E.; Kepler, E. J., and Wilder, R. M.: Clinical Observations with Insulin Protamine Compound, *J. A. M. A.*, 106: 1701 (May 16), 1936.

[5] Kerr, R. B.; Best, C. H.; Campbell, N. R., and Fletcher, A. A.: Protamine Insulin, *Canad. Pub. Health J.*, 27:157 (Apr.), 1936.

[6] Winnett, E. B.: The Treatment of Diabetes with Protamine Insulin, *J. Iowa State M. S.* (May), 1936.

[7] Allen, F. H.: Some Difficulties Arising in the Use of Protamine Insulinate, *J. A. M. A.*, 107:430 (Aug. 8), 1936.

[8] Freund, H. A., and Adler, S.: Effects of Standard, Protamine and Crystalline Insulin on Blood Sugar Levels, *J. A. M. A.* 107:573 (Aug. 22), 1936.

[9] Rabinowitch, I. M.: Observations on the Action of Protamine and Insulin and Its Use in the High Carbohydrate-Low Calory Diet in the Treatment of Diabetes Mellitus, *Canad. M. A. J.*, 35:124, 1936.

[10] Rabinowitch, I. M.; Foster, J. S.; Fowler, A. F., and Corcoran, A. C.: Clinical Experiences with Protamine-Zinc-Insulin and Other Mixtures of Zinc and Insulin in Diabetes Mellitus, *Canad. M. A. J.*, 35:239 (Sept.), 1936.

[11] Peck, F. B.: Personal Communication to the Author (Sept.), 1936.

Case III. A woman, age 64, with diabetes the past 8 years, required 15 to 16 units of insulin R two or three times a week. With approximately the same dose of insulin P once a week she can be kept in as good, if not better, condition.

Case IV. A woman, age 46, diabetic for 6 years, sustained cuts in an injury. Previously she had had no insulin. On finding her fasting blood sugar at 188, sugar and acetone in her urine, she was started on insulin P, and stabilized on 24 units in one dose each morning. After a while she was dropped because she did not co-operate properly.

Case V. A man, age 41, whose diabetes had been under control by diet the preceding 4 years, developed a neuralgia simulating trigeminal neuralgia and later an axillary abscess, each with glycosuria. After a few injections of insulin P each time the symptoms promptly disappeared, and his condition is kept under control with only an occasional dose of insulin P.

Case VI. A woman, age 56, diabetic about 12 years, was taking 20 units of insulin R daily. She was put on insulin P, stabilized on 18 units, once daily, but she, also, was dropped because of lack of cooperation.

Case VII. A woman, age 53, diabetic 2 years, was seen because she was having a rather severe respiratory infection. Her blood sugar was 286; her urine showed sugar and acetone. A few doses of insulin P cleared up the hyperglycemia and glycosuria, and she made a good, uneventful recovery.

Case VIII. A woman, age 46, with an inactive adenomatous thyroid, bad teeth, and the tell-tale symptoms of diabetes, was found with hyperglycemia and glycosuria. Several doses of insulin P brought the diabetic state under complete control, and it is now being kept that way by diet alone.

Case IX. A woman, age 55, who had previously taken insulin, then discontinued it, was first seen with her physician when she was in diabetic coma. Regular insulin was given while the coma lasted, and when it was relieved, insulin protamine was added. A mild insulin reaction followed after giving insulin P at one time and insulin R at another time, so only insulin P was used, and there were no more reactions. When she became aglycosuric, her physician took over the subsequent management of her case.

Case X. A woman, age 47, with diabetes of less than a year, first came under treatment early last week. She was started on insulin P, and is now taking about 20 units in one dose each morning. Whether she will continue to need it or not, or what the optimum dose may be, can not be stated at this early date.

SUMMARY

The treatment of diabetes mellitus is comparatively simple, provided the diabetic is taught to watch himself and to keep his condition always under complete control. By so doing complications may be averted, but should they arise, aggressive treatment offers a much better prognosis than heretofore.

Surgery should be undertaken only if strictly unavoidable, and when it is, the diabetes ought to be handled by one thoroughly experienced in managing it.

Mild diabetes can be fully controlled by diet; severe cases require insulin.

A new insulin preparation—protamine insulin—is being tried out, and no doubt soon will be available for general use. This new insulin is absorbed more slowly than the old, is effective over a much longer time, very seldom, if ever, induces severe reaction, permitting large doses to be given in one injection. Multiple daily injections of insulin are, therefore, unnecessary in many, if not most, cases. Except in pre-coma and coma, the use of this new insulin can be very highly recommended.

DISCUSSION

H. L. COOPER, M.D. (South Bend): I have listened to Dr. Edlavitch's paper with a great deal of interest, and I agree with him in his enunciation of the general principles underlying the successful treatment of the diabetic. However, while he states that diabetes is a comparatively simple clinical problem, he does not give us the answer to that statement, a simple management. Logically, it follows that if it is a simple problem, the treatment should be just as simple.

It is true that we now estimate our insulin dosage in a much simpler way. Formerly it was computed on a mathematical basis, i.e., the increase of the blood sugar level over the normal and the total sugar output in the urine in 24 hours. We have once more learned that the human body cannot be reduced to a mathematical equation. We found that each patient reacted in an individual way to insulin; in other words, the insulin sensitive patient. The basis of our present method of insulin dosage is a trial and error procedure.

It is easy to make a diagnosis of diabetes. It should be easy to recognize a complication but, in my opinion, it is not easy to treat a diabetic. It is not easy to select the proper diet for each patient. One only has to review briefly the changes in dietary advocated from the pre-insulin era to our present conception. Since insulin was given to us by Banting and his associates, we have had the moderate carbohydrate intake advised, followed by the high fat feeding and then a reversal to a higher ratio of carbohydrate to fat. Now most men prefer a ratio of 1:1 or 1½:1 carbohydrate to fat. In support of the theory of high carbohydrate intake over the high fat feeding is the experimental work done on rabbits which shows that arteriosclerosis is associated with high cholesterol and lipoid value in the blood stream. Later it was proven that the arteriosclerotic changes in the rabbit and in man are not the same. Minot and Weiss sum it up by saying that the evidence is not convincing and unless one were prejudiced in

its favor it would hardly influence an opinion as to its association. It seems more logical that infections, periodic dehydration, inadequate diets, particularly in certain vitamin and salt content, play a more important role.

It would seem, then, that there is a disagreement among the authorities on the selection of the proper diet in the diabetic even today.

Formerly we believed that diabetes was the result of faulty carbohydrate metabolism alone. Now we feel there are other endocrine imbalances associated in its production.

In the past we have believed that the glucose tolerance test was a measure of the ability of the pancreas to produce insulin. Now, as you know, experimental work questions that.

These are only a few of the changes which are taking place in our conception of the etiology, diagnostic interpretations, diet and treatment of this disease. Time limits a further enumeration but it does show that diabetes is a complex problem.

It is my experience that each diabetic presents individual problems in treatment which tax my ability to the utmost. I contend that any treatment which cannot be reduced to a standard and which requires so much clinical judgment is not simple. A general acceptance of such a dictum would give rise to the belief that any man could treat the disease, even without adequate understanding or study.

Dr. Edlavitch, who is a well trained, competent clinician, finds the management of an uncomplicated diabetic simple and, therefore, feels that it is simple for everyone. The title of his discourse on the one hand and his frequent admonitions throughout his paper that the man treating these cases must be well trained on the other hand are difficult to reconcile. I do not want the title of his paper, and I am sure he will agree with me, to give a false sense of security to any man and to make him feel that, without adequate training, he can treat this disease without avoidable bad results to his patient. This failure to understand the known facts about the disease is usually due to a lack of time but, unfortunately, there is another class in which the stumbling block to efficiency is pure mental lassitude.

I am not entirely in accord with the idea that operation should be withheld, except where it becomes absolutely imperative. Drs. Waltman, Meyerding, Judd, and Wilder, of the Mayo Clinic, in a report read in December of 1933, report a series of 2,086 operations, both major and minor, with a mortality rate of only 3 per cent, and in this report it is stated that "it should be emphasized that no patient after October 23, 1923, has been refused the benefits of surgery on the ground of diabetes; and that the selection of patients for operation has been made on the basis of exactly the same indications as those followed for selection of patients who are not affected with diabetes."

This experience agrees essentially with my own. All men agree that the patient must be adequately prepared before operation is undertaken but, if there is an emergency, operation should not be withheld because the patient is a diabetic. The anesthetic must be carefully selected and given and must be of short duration. The surgeon must be competent and there must be close cooperation between him and the medical man.

It is my belief that in the future there is going to be a markedly increased death rate reported in diabetic patients in whom surgery is done. We must not be misled by statistics, however, because it must be remembered that the average span of life of the diabetic has been lengthened and, therefore, there will be a consequent increase in the more serious diseases which are found in a more advanced age group, such as carcinoma of the stomach, for example. There will also be an added risk in the more advanced age group because of the breaking down of the efficiency of the cardiorenal vascular system. This will not be due entirely to the diabetes but to the more advanced age group itself.

Again I cannot agree with the essayist in all his statements in regard to insulin protamine. In his 10 cases presented there are 2 who did not follow the treatment and were dismissed. One is so recent a case that no conclusions are drawn from it. There are 4 in which only an occasional dose of insulin P is required or they require only dietary management now. This leaves only 3 which may be classed as mild to severe. In these three cases I do not believe that anyone can question the efficiency of insulin P treatment. I do object to the inference, in the group of 4 cases, that the use of insulin P was necessary or that it should be given credit for the good results obtained, over the older method of handling. Three of the 4 case reports suggest that insulin is curative in its action.

I do believe that insulin protamine will find a very distinct place in the treatment of diabetes. However, it is so new in its clinical application that we must be very guarded in our statements as to results obtained. Let us not condemn a very useful addition to our treatment by insufficiently studied cases because, if we do, we are bound to have bad results. Let us not be carried away by an unjustified enthusiasm. That, too, will react adversely.

My experience, as well as the reports of many recorded cases, differs somewhat from the essayist in his statement that there are few, if any, reactions following insulin P treatment. It is true that the reactions are less frequent, but insulin shock does occur. It comes on much more slowly and it takes a much longer time to pass, even after the usual measures have been taken to combat hypoglycemia. The symptoms come on slowly and without the usual warning. This is probably due to the gradual and sustained lowering of the blood

sugar level and to the cumulative effect produced by prior injections.

JOHN H. WARVEL, M.D. (Indianapolis): I would like to say a few words in regard to protamine insulinate. We have used this preparation for one year and have treated 68 cases up to date. The shortest time of treatment has been two weeks and the longest case has been under observation one year. These cases have all been moderately severe diabetics, requiring three to five doses of insulin per day. We have not selected cases that could be well controlled with regular insulin.

Every patient was placed in the hospital for from two to six weeks for observation before starting protamine insulinate. Most of these were patients who had been on insulin treatment for from one to ten years. They were stabilized on a diet and regular insulin and then gradually transferred to protamine insulinate. At first we used only small doses at supper time, this dose usually being equivalent to the combined supper and midnight injections of regular insulin.

In the beginning we had some severe reactions while using the plain protamine insulinate. These reactions would not come on early after the injection. They would appear slowly and were atypical, as compared to the reactions following the injection of regular insulin. The patient was often not aware of a reaction, as the drop in the blood sugar level was so gradual. Patients were sometimes found in a stuporous state by our night nurses. Occasionally we would give these individuals glucose and they would return to normal, only to have another reaction in an hour or so. This we had not observed with the regular insulin. Much difficulty was encountered in attempting to stabilize our cases with plain protamine insulinate.

In May of this year we were given zinc protamine insulinate. This is a slower acting insulin. The marked fluctuations in the blood sugar level became less noticeable, and such severe hypoglycemic reactions no longer occurred. We still have a few hypoglycemic reactions from 1:00 a. m. to 6:00 a. m. Perhaps the taking of a small amount of food at bedtime will eliminate these in the future.

What can one accomplish with protamine insulinate? You can increase the carbohydrate intake materially without increasing the dose of protamine. You can reduce the number of injections of regular insulin from 3 to 5 per day to one larger dose of protamine insulinate per day. Occasionally a severe case may require one dose of regular insulin and one of protamine insulinate per day. Our average dose is 35 units; some cases may require 60 to 80 units per day. You can expect a gain up to the normal in weight and also a gain in sugar tolerance as the treatment continues. You will observe an improvement in the general condition of your patients.

All of our cases want to continue this treatment. Only one case was returned to the regular insulin; this was because of the appearance of a bronchopneumonia. We have treated patients with protamine from 4 to 69 years of age.

It was thought at first that protamine insulinate was unstable, that it had to be freshly mixed, and was only potent for ten days. We have completed some tests in the past few days which lead us to believe the preparation is potent when mixed and allowed to remain at room temperature for as long as six months.

We believe that protamine is here to stay, but feel that each case must be treated individually. We have no definite formula of dosage to follow in substituting protamine for regular insulin. The optimal time for the injection of this new insulin varies in different subjects. We have observed, however, that if the protamine is given at supper, the dose is usually one and one-half times the amount of regular insulin formerly injected. The morning dose of regular insulin must soon be reduced because of the low fasting blood sugars which result from its use. Soon the noon dose may be discontinued, and later the breakfast dose is omitted. In some severe cases, as seen in children, we give both regular and protamine insulinate before breakfast. We can then often omit the noon and supper dose of regular insulin.

Protamine insulinate will, I believe, change our treatment of diabetes. When we understand this preparation better it should help to make the diabetic more content, prevent many of the complications, and simplify the management of these patients.

TWO THINGS TO DO NOW:

1. Pay your 1937 dues.

2. Plan to attend the Secretaries' Conference in Indianapolis, January 31.

Read page 35.

SURGICAL ASPECTS OF HEMATURIA*

(A) KIDNEY ORIGIN
(B) BLADDER ORIGIN

JAMES F. BALCH, M.D.
WILLIAM N. WISHARD, JR., M.D.

Indianapolis

(A) KIDNEY ORIGIN. BY JAMES F. BALCH, M.D.

Hematuria clearly depicts serious pathology and is a definite omen of impending disaster.

It is probably unnecessary to comment before this audience upon the necessity of a complete urological investigation of any patient exhibiting blood in the urine. Perhaps it would not be amiss, however, to stress two points. The famous aphorism, "A painless hematuria is a dangerous hematuria," should never be forgotten. And again, the time to study a hematuria urologically is *during the period of bleeding.*

Hematuria of renal origin may be due to many causes, but only a few of the more common cases which we all see rather frequently will be discussed.

RENAL NEOPLASM

The three cardinal symptoms of renal tumor are:

(1) Hematuria.
(2) Lumbar pain.
(3) Presence of tumor mass.

Unless clots of blood obstruct the ureter, the bleeding is usually painless, and rarely is the hemorrhage of sufficient magnitude to necessitate a hasty nephrectomy prior to careful study.

As to diagnosis, a few points deserve mention. Pyelography is our most valuable aid in clinching the diagnosis of this dreadful disease. A retrograde pyelogram seldom fails to reveal the true nature of pathology, while, on the other hand, intravenous urography is very inefficient because of its lack of infinite detail and poor concentration. One of the greatest pitfalls for intravenous urography is in the field of renal neoplasms.

The following points are worthy of emphasis regarding the prognosis:

(1) Obviously the earliest cases have the best chance of survival.

Recently, I have seen one patient with hypernephroma whose symptoms had been present thirty-six months and another patient with carcinoma of the kidney whose complaint was first registered sixty months previously. A series of 192 cases reviewed by Judd had an average duration of symptoms of twenty-one months. Such delay is disastrous. A plea for early diagnosis and treatment is imperative.

(2) The younger the individual, the more malignant the tumor.

(3) Sarcoma renders the prognosis more gloomy than do other types of renal neoplasm.

(4) In 256 cases at The Mayo Clinic, Walters reports 43 per cent have lived five years or more. Young has 25 per cent of his series alive over five years. These reports are in much contrast to others. One series, with which I am acquainted, comprising over one hundred cases, has no individual alive over seven years.

In treating these cases, a thorough knowledge of the behavior of the various renal neoplasms presupposes proper management of the case. I do not propose to discuss the technique of nephrectomy but do wish to state that nephrectomy alone is inadequate therapy for papillary tumors of the renal pelvis. Because these growths grow down the ureter by direct extension, total ureterectomy as well as nephrectomy are required.

Preoperative and postoperative radiation helps in some cases, particularly sarcoma, and should be used. Preoperative x-ray therapy at times will reduce an inoperable tumor of vast proportion to one of size and mobility enabling nephrectomy to be successfully executed. One should not allow this reduction of size, which at times is indeed miraculous, to cause a false sense of security. The growth will rapidly recur and is then very resistant to all forms of radiation.

The fact that the number of cures is in direct proportion to the size of the tumor and duration of symptoms should serve as a plea for early diagnosis and radical surgery.

RENAL CALCULI

Renal calculi often cause hematuria, but it is usually slight in amount, and as a rule follows an attack of renal colic. The bleeding may be massive and persistent, requiring surgical intervention, as did two of our cases with a stone whose sharp edge had eroded through a large sized artery in the kidney substance adjacent to the kidney pelvis. This type of hemorrhage, however, is not the rule in renal calculus, thereby giving us ample time to make a careful study by cystoscopy and x-ray in order to arrive at a definite diagnosis.

Once the diagnosis of calculus is made, we are confronted with the many problems which arise in managing these cases. One of three things must be done:

(1) Expectant observation.
(2) Surgical removal of the calculus.
(3) Nephrectomy.

Most calculi with a diameter of less than 1 cm. on the x-ray plate will pass spontaneouly and we are justified in waiting a reasonable length of time before surgery, providing infection is not present or renal destruction due to obstruction is not taking place. Should the stone require surgical removal, two routes of attack are available, namely, pyelotomy and nephrotomy.

If at all possible, the stone should be removed through a pyelotomy incision rather than one traversing the renal parenchyma. The following figures speak for themselves:

* Read before Surgical Section, Indiana State Medical Association at the South Bend session, October 7, 1936.

Pyelolithotomy—Mortality, 1%
Nephrolithotomy—Mortality, 10%
Nephrectomy—Mortality, 2%

RENAL TUBERCULOSIS

Renal tuberculosis is a common disease and occurs usually between the ages of twenty and fifty. It is very rare in the young and aged.

Hematuria is a very frequent finding in renal tuberculosis. It may be moderate or massive but is usually associated with a marked frequency and burning due to an accompanying tuberculous cystitis. The following aphorism is worthy of mention: A hematuria associated with a pyuria means renal tuberculosis until proved otherwise.

Without entering into the consideration of diagnosis, it may be stated that the accuracy is very high in detecting such pathology. Although we may admit that it is possible for a small tuberculous lesion in the renal parenchyma to heal, it is well known that a well developed process with renal cavitation will lend itself to nothing short of nephrectomy. The low primary mortality of nephrectomy which is less than 2 per cent justifies the procedure, even though a slight amount of pulmonary activity is present.

Within a period of five years, over 60 per cent of the non-operated cases will be dead, while the mortality of a similar group subjected to nephrectomy will be in the neighborhood of 20 per cent.

I do not want to be misunderstood. Renal tuberculosis is not a surgical emergency and should be carefully studied prior to surgery, from the standpoint of bilateral renal involvement (which is often present) and associated tuberculous lesions elsewhere in the body. This is particularly true in young adults. A hasty nephrectomy in these individuals often results disastrously. I have seen several such cases rapidly die of miliary tuberculosis or suffer with a marked flare-up of other tuberculous lesions. We advocate deliberacy and caution in managing these young adults, hoping that immunity or some protective process will intervene.

The technique of nephrectomy for renal tuberculosis deserves consideration. Due to peri-renal adhesions, which are characteristic, removal of a tuberculous kidney is usually a difficult process. It should always be done through a lumbar extraperitoneal approach and never trans-abdominal, due to the fact that 25 per cent of nephrectomy wounds break down and have temporary persistent draining sinus formation.

The reason for this is due to two things:

(1) Incomplete removal of diseased perirenal fat.
(2) Persisting ureteral infection.

Many methods of handling the tuberculous ureter at the time of nephrectomy have been advocated, such as injection of pure phenol, inversion of the stump, cautery and bringing the stump to the skin surface. Practice of these various methods, however, does not reduce the incidence of postoperative wound suppuration to any great degree. The real pitfall is inadequate removal of the peri-renal fat. This should be meticulously done in every case.

Some men advocate closure of the wound without drainage to prevent secondary infection and sinus formation but I will have to admit that I have never had enough nerve to adopt this practice.

RENAL TRAUMA

With modern high speed transportation, we are naturally being confronted with increasing numbers of urinary tract injuries.

Rupture of the kidney is attended with three cardinal symptoms:

(1) Hematuria.
(2) Loin tumor.
(3) Loin pain.

The passage of blood in the urine is the most characteristic finding. This varies considerably in different cases and is no criteria as to the amount of renal damage.

There may be a hematuria with no rupture, such as contusion, while on the other hand rupture attended by no blood in the urine is due to three possibilities:

(1) Occlusion of the ureter by clot.
(2) Rupture of the kidney parenchyma not communicating with the pelvis.
(3) Avulsion of the kidney from the ureter.

As a rule the course of bleeding is somewhat irregular but usually lasts for several days.

Local pain in the loin is usually excruciating and requires sedation.

Tumefaction of the loin due to perirenal extravasation of blood and urine often takes place.

Treatment of this group of cases is exceedingly interesting. Over 95 per cent of these patients will recover without surgical intervention but the remaining 5 per cent require emergency surgery. The questions of whether to operate and when to operate are important. The secret to the answers of these questions is constant and close observation. We make it a hard and fast rule to have the pulse and blood pressure checked every thirty minutes. Should any marked change in their readings occur which would indicate hemorrhage of massive character, immediate surgery is indicated.

The operation should be done as rapidly as possible. If intra-abdominal lesions are also expected, the trans-peritoneal approach offers not only an opportunity to inspect the viscera but affords a quicker access to the renal artery. Should this be torn, nephrectomy must be done, but usually the bleeding will be found to be coming from a badly lacerated renal parenchyma which can be readily sutured.

It may be stated that the lumbar approach will be the best route of attack in most cases requiring surgery.

SUMMARY

1. A painless hematuria is a dangerous hematuria and often means malignancy.

2. Don't forget to remove the entire ureter as well as the kidney in papillary tumors of the renal pelvis.

3. When about to remove a renal calculus, remember the following mortality statistics:

Pyelolithotomy—1%

Nephrolithotomy—10%

4. Hematuria associated with pyuria means renal tuberculosis until proved otherwise.

5. Constant vigilance is the keynote of success in managing cases of renal trauma. Ninety-five per cent get well without surgical interference.

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(B) BLADDER ORIGIN

BY WILLIAM N. WISHARD, JR., M.D.

Gross hematuria of bladder origin always requires minute investigation as does bleeding from other parts of the urinary tract. The oft-times intermittent character of such bleeding, frequently due to the tendency of nature to heal herself, has so repeatedly given false security to both patient and physician alike in hoping the cause was trivial that we make no apology for again emphasizing the aphorism, to wit: every patient complaining of gross hematuria should be subjected to such technical procedures as are necessary in the individual case to arrive at the diagnosis of the underlying cause.

Fortunately enough, initial attacks of hematuria are seldom so severe that the patient is endangered by the quantity of blood lost. It is, therefore, possible to examine him in a methodical, deliberate, orderly fashion, delving into the history, making a careful physical examination, as well as laboratory tests, before assaying the intricacies of a complete urologic examination. While it is by no means the sole part, cystoscopy is an important component of this examination. When the diagnosis is established, treatment may be instituted along rational lines.

There is a smaller but more serious group of patients who present themselves to the physician for one of two reasons, or both; either the bladder has filled up with clots causing the pain of an overdistended viscus, or the blood loss has been so great that the patient shows systemic signs of severe hemorrhage and serious anemia. Here the physician is confronted with a situation demanding immediate action. It is to this group that we wish to direct your attention for the remainder of this paper.

It is impossible in the allotted time to enumerate all the causes of massive bladder hemorrhage, so, for simplicity, we will arbitrarily classify them under two headings, namely: hemorrhage due to intravesical or vesical neck disease, and that due to trauma. Of the former, intravesical and bladder neck disease, by far the largest number of patients we see are bleeding from a tumor of the bladder or from benign enlargement of the prostate. We will confine our remarks to these two diseases.

The patient may give a history of gradually increasing bladder irritability, with or without previous attacks of hematuria. The onset of gross hematuria is accompanied by aggravation of dysuria and strangury. A rapid, thready pulse, associated with the distressed, pained, facial expression characteristic of overdistention, may warn one that a blood transfusion is immediately necessary. A hasty survey of the patient may give the physician a lead as to the differential diagnosis, whether tumor of the bladder or prostate, but it is the bleeding and not the cause which demands immediate treatment in this particular instance.

A rectal examination causes no delay and will detect an enlarged prostate, but failure to find it per rectum by no means excludes hypertrophy of the intravesical median lobe. With advancing obstruction, the very vascular prostatic urethra becomes eroded and sudden massive hemorrhage as described may ensue. An examining hand detects a midline suprapubic mass, the distended bladder. Treatment is directed along two channels: first, supportive of the patient's general collapse; second, toward the evacuation of blood from the bladder and control of hemorrhage. It will not be necessary before this section to go into the details of supportive treatment, such as sedation, intravenous fluids, blood transfusion, maintenance of body heat, etc. As for stopping the hemorrhage, it may be stated in a general way that complete evacuation of the clots alone will frequently give adequate control of bleeding. Such patients are in poor condition for surgery, demanding utmost conservatism before resorting to more heroic measures.

Evacuation of clots from the bladder requires no elaborate armamentarium. A double-eyed No. 22F silk Coude catheter sterilized in a 1:5,000 cyanide of mercury solution, a little lubricant, an inexhaustible supply of warm sterile water or boric acid solution, a four-ounce piston syringe, a suit of old clothes for self protection, and endless patience are the prerequisites. The catheter is passed, relieving the patient of the fluid contents of his bladder. Then the physician's job begins. By painstaking irrigation, using 2 to 4 ounces of very warm solution in the suction syringe at a time, the clots are broken up and aspirated from the bladder. To do this may demand a five-gallon bottle of solution and exhaust two strong arms, but it can be accomplished. Unless the bleeding is continued to a dangerous degree, complete evacuation will eventually result in the return flow of clear irrigation solution. Then and only then may the bladder be called empty. The catheter is anchored in the urethra and the frequency of subsequent irrigations determined by the continued activity of bleeding.

A word might be said as to the various hemostatics. Some of them contain horse serum with its risks. All are directed toward acceleration of clotting. Adrenalin has been injected into the bladder. Calcium salts have been administered. None of these secondary measures are of much avail as long as clots remain in the bladder, and when that organ is rid of its foreign body the probability is that the bleeding will abate without the use of hemostatic medicaments.

Tumors of the bladder are much more prone to continue bleeding after removal of clots than is an eroded vessel in the prostatic urethra. When the bleeding is controlled and the patient's general condition is improved, routine systematic diagnostic measures may be undertaken at an elective time.

But when is one justified in opening the bladder as an emergency to control hemorrhage? First, when no sort of catheter can be introduced per urethram. Second, when thorough attempt at catheter emptying or persistence of bleeding shows that evacuation has failed, or extensive hemorrhage continues. In doing a suprapubic cystostomy for control of hemorrhage, it is well to remember that a dehydrated, exsanguinated patient is a poor surgical risk. Pre, and post-operative transfusion will make him a better one.

If a tumor of the bladder is found it will have to be dealt with as seems best under the circumstances. If operation shows that the bleeding is coming from the urethra of an enlarged prostate, the clots are removed and bleeding controlled, if necessary, by packs, hemostatic bag or high frequency current. Rarely, if ever, is it necessary to enucleate the prostate at such an inopportune time. Ample drainage is instituted and prostatectomy left for a later date.

Hematuria originating from traumatic vesical injury is in an entirely different category from the above mentioned varieties. In all instances of bladder trauma it is first and foremost necessary to ascertain if the viscus has been ruptured and if so, where. Injury involving tear into the peritonel cavity always demands surgical drainage, so that the surgeon is compelled to know precisely about this detail. There are several available methods. If physical examination shows marked splinting of the abdominal muscles associated with pain and tenderness, peritoneal injury should be suspected. The leukocyte count may be elevated in either type of bladder injury, but more likely in the intraperitoneal type of tear. Intravenous urogram may show an extravasation of opaque media into the abdomen. This method of examination is the most benign so far as the patient is concerned, but owing to technical defects it may be of insufficient diagnostic value. It is then necessary to resort to further measures. A catheter may be passed and a measured quantity of sterile solution injected into the bladder. If there is an intra-peritoneal rupture all the solution may not be recovered. This method is often inaccurate and not without danger of soiling the abdomen with infectious material. An air cystogram or one made with an opaque media may show the location of the laceration. Finally, it may be wise to cystoscope the patient and by direct observation locate the site of the injury. All these instrumental methods are risky. If by one of the foregoing methods an intraperitoneal tear of the bladder is found, it is imperative to open the bladder and abdomen, suprapubically, repair the tear and close the bladder with drainage. If the injury is extraperitoneal and consists of an actual break of the vesical wall so that urine may escape into the paravesical tissues, it will likewise be necessary to drain the organ surgically. If, however, the injury is merely a contusion without tear, the clots may be evacuated as previously described, a catheter anchored and the patient treated expectantly. If, however, any signs of urinary leak into the paravesical spaces supervene, the bladder should be opened at once and drainage instituted.

SUMMARY

1. All instances of gross hematuria should be investigated to such limits as are needed to determine the exact cause of bleeding.

2. Bladder hemorrhage may be classified: first, those cases of slight severity where orderly urologic examination may be done at an elective time, and second, those cases of severe bleeding, demanding immediate attention.

3. Only more frequent causes of massive bladder hemorrhage have been discussed. In non-traumatic bleeding, treatment consists of emptying the bladder of clots and stopping hemorrhage, dealing with the underlying disease at a more opportune time if possible. In traumatic bleeding, the bladder must be drained surgically if rupture is present. Contusion of the bladder without break of its walls may, at times, be treated by evacuation of clots and in-dwelling catheter drainage.

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DISCUSSION

S. W. LITZENBERGER, M.D. (Anderson): Hematuria, to me, is a very interesting and fascinating subject. It is interesting because of the detective work necessary at times to ferret out its exact cause. It taxes the resources of the most expert and learned, sometimes, to say why blood is present in the urine, particularly when it is coming from the upper urinary tract.

Dr. Balch and Dr. Wishard have both stated the necessity for complete investigation in cases of hematuria that cannot be easily accounted for, so as to be able to say, "the blood is coming from this place or that place and is caused by a given lesion." This can be done except in a very small percentage of cases: those cases in which we used to cloak our ignorance by assigning to them the very important sounding diagnosis of "essential

hematuria," but which we are now honest enough to term, "hematuria—cause undetermined." Some years ago it was customary to allow a margin of 15 per cent in all cases of hematuria, in which the cause could not be determined, but, thanks to the combination of better facilities, more painstaking attention to detail, plus the element of time, and careful follow-up, this percentage has gradually decreased.

For years urologists and general surgeons have been preaching the doctrine, not only to our patients, but, regretfully I must say, to our fellow practitioners, that hematuria can be and very frequently is a very serious symptom, particularly as Dr. Balch stated, when it is painless. Unfortunately, there is still reason why this missionary work should be continued. Its importance is well illustrated by the fact that in a recently reported series of 1,500 urological admissions by Rathbun, 203 gave hematuria as their chief complaint. One hundred six, or more than 50 per cent of these 203, were traced to neoplasm somewhere in the urinary tract. Of this group, 84 were malignant and 22 were benign. It is also interesting to note the other causes of hematuria in this series. Forty-five or 22.1 per cent, were due to urinary calculi; though of a total of 122 cases of urinary lithiasis in this group of 1,500 urological cases, only 21.8 per cent had bleeding as a symptom. Seventeen, or about 8 per cent, were due to benign hypertrophy of the prostate, and seven of the above-mentioned neoplasms, or about 3.5 per cent of the 203 cases of hematuria, were prostatic malignancies. The remainder of the cases were scattered among a variety of lesions, as follows: Acute alcoholism, 1; purpura hemorrhagica, 1; trauma, 2; urethral stricture, 4; acute prostatitis, 1; bladder diverticulum, 1; ulcer of the bladder, 3, and polycystic kidney, 1.

Early diagnosis of renal neoplasm is frequently difficult, and I agree with Dr. Balch's statement that pyelography is our most valuable means of obtaining information, and even so, it will often tax the combined wisdom of surgeon and roentgenologist to make the diagnosis. I saw a case recently in which a pre-operative diagnosis of papilloma of the renal pelvis was made, principally on the evidence afforded by a pyelogram, which showed a definite filling defect. Blood and pus were both present in the urine. Nephrectomy was done, and when the kidney pelvis was opened, a flat stone about 1 cm. in diameter was found lodged, and partially obstructing the lower calyx. This, of course, was a non-opaque calculus which cast no x-ray shadow and which could not be palpated at operation.

Nephrectomy for unilateral renal tuberculosis is the accepted practice, when the function of the other kidney has been proved adequate. However, a recent nephrectomy in the face of bilateral renal involvement has proved justifiable. This young man had extensive tuberculosis of his left kidney, as shown by tubercle bacilli in the urine and very marked impairment of function. Pain in his left loin was very severe. His right kidney urine also showed tubercle bacilli, but the function was good. Blood and pus were constantly present in the urine. He was fast losing ground, and it seemed advisable to do a left nephrectomy, because of the severe pain. This was accomplished with good recovery. In three months he had gained 20 pounds, and though at the present time, nine months post-operative, he is gradually losing ground, he has been free of his loin pain.

Dr. Wishard's description of evacuating a bladder filled with blood clots is quite vivid. Those of you who have never gone through the experience have something to look forward to. Too many of these patients, and particularly the aged prostatics, are subjected to emergency cystostomy at a time when they are least likely to survive it. The clots can be broken up and aspirated as Dr. Wishard has described. It is a difficult and exhausting job, but the reward of having a living patient in such a high percentage of cases justifies such labor. Followed by catheter drainage, which keeps the bladder at rest, the bleeding almost always stops.

In cases of suspected rupture of the bladder, I feel that diagnostic measures should be limited to physical findings and intravenous urography. Any instrument passed *per urethram* carries the possibility of transmitting infection. Whether the rupture is intraperitoneal or extraperitoneal, suprapubic surgery is always indicated. When the incision is carried down to the bladder and there is no evidence of extra-peritoneal rupture, then the peritoneum can be opened and the peritoneal surface of the bladder examined. If the tear is found there, it can be closed and then the operative wound in the peritoneum closed before the bladder is opened and drainage instituted. These cases of ruptured bladder are emergencies of the first order, and anything that saves time will pay dividends in increased percentage of recoveries.

C. J. COONEY, M.D. (Fort Wayne): There are two things which I think should be emphasized. The first is intravenous urography in the diagnosis of renal neoplasm. I think it is the duty of the urological fraternity to emphasize the fallacy of trying to depend on intravenous urography entirely. The advertising matter of the manufacturing companies has given the general man an erroneous idea as to the dependency of intravenous urography. In all cases of hematuria, after much careful study, I am certain that we should cystoscope them first and then use intravenous urography. I have seen several cases that have been neglected for months because of erroneous conclusions drawn from improperly filled kidney pelvis, where intravenous urography was employed. I think cystoscopy is still the prime method of diagnosis, and intravenous urography has a definite place as a supplemental method of diagnosis.

Another thing is the diagnosis of rupture of the bladder. Very little is said about the value of air cystograms. Possibly in many cases they are not necessary, but I have been impressed by how quickly and accurately a rupture can be diagnosed with a minimum danger of infection. I think intravenous urography in these cases should be used first, but a carefully done air cystogram will cause no trouble and in almost every case will make a definite diagnosis of rupture, either intra- or extra-peritoneally.

Dr. Wishard said that these cases should be treated surgically and at once. However, as in all cases, there are exceptions. I have a girl patient, 16 years of age, who sustained a severe fracture of the pelvis in an automobile accident. An air cystogram showed a small extra-peritoneal tear, one-half to three-quarters of an inch long, in the bladder, with extravasation of urine. The girl's condition was not good, and I thought surgery was contraindicated. A Pezzar catheter was inserted for twelve days, then removed and another cystogram done. Perfect healing was demonstrated. In that case, surgery would have been out of line.

Another thing which is probably not so important, but which I feel is of some value, is the use of spinal anesthesia in nephrectomy for tuberculosis. I have used avertin and ethylene, but I believe in a tuberculous kidney either one is inferior in many ways to spinal anesthesia. I have used it in many instances and have never had a bad result. I believe the patients have less shock and less trauma in every way when spinal anesthesia is used instead of ether.

C. C. HYDE, M.D. (South Bend): The authors should be complimented for such a well presented case in favor of careful examination of all patients with hematuria. I think you men will say the frontier is long past, but that is not so. Every day urologists have patients brought to them to whom the general men who saw the patients first said, "I will give you something to stop the hematuria." Missionary work is still needed on the subject of hematuria. As was well emphasized, hematuria should be investigated until the cause is found and rational treatment introduced.

I want to second the fact that intravenous urography is almost a sure source of error in early renal malignancy. If there has been a complicating infection, the diagnosis may be overlooked, while retrograde urography may give the information. I had a patient in whom we have a perfectly normal pyelogram with intravenous urography. The only thing that made us wonder was that in the upper corner there was a little bit of irregularity in an otherwise perfectly normal pelvis. Retrograde pyelogram showed a long calyx running up into a tumor at the upper pole. So missionary work is also needed to counteract the effect of

(Continued on page 26)

ASTHMA DUE TO HOUSE DUST*

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Muncie

The first reference to house dust as a causative factor in asthma was made by Cooke in 1918, and in 1921 Kerne independently reported the same findings. Since 1921 a number of references have appeared in the literature dealing with the subject of the importance of house dust as a cause of asthma, but many of these references have confused allergy to some specific allergen in house dust with non-specific house dust sensitivity. Such substances as danders, feathers, and household powders may cause asthma, but there is also a large group of asthmatics in which an unknown fraction of house dust appears to be the causative factor.

In the time at our disposal it will be impossible to discuss the theories and scientific background of this important field of allergy, nor will we have time to examine in more than an incidental way the various methods involved in the management of house dust asthma. For a discussion of these phases of this type of case I would refer you to the textbooks and articles by such nationally known allergists as Feinberg, Bray, Coca, Rowe and others. In this paper I wish to describe briefly the method of approach which we have used in cases of asthma and the early results which have been obtained in a series of treated cases which have been under observation for the past year or more.

In each case a careful history is taken, a physical examination made, and scratch skin tests performed with a large assortment of stock allergens. Of these preliminary measures the history frequently is of the greatest assistance. Physical examination is carried out to exclude contributory factors such as cardiac disease, or upper respiratory infection. Skin tests are of great value but that value should not be exaggerated and the information gained by their use should be used only as a corollary to the consideration of the case as a whole.

When the case record is complete, it is scanned carefully with a view to evaluating the various factors involved. Should a patient be found sensitive only to allergens such as orris root or feathers it is comparatively easy to obtain relief by their removal from the patient's environment. As in all types of lesions, removal of the cause is the most effective form of treatment, but in the case of house dust removal is obviously impossible. For this reason treatment by means of desensitization is usually necessary.

In cases of house dust asthma, it is the rule to find the skin sensitive to a dust extract but unfortunately the majority of patients have additional sensitivities and so these present a more complex problem which must be worked out in detail in

* Presented before the Section on Medicine of the Indiana State Medical Association at the South Bend session, October 8, 1936.

each case. However, there are certain fundamental principles on which all cases should be based. These are: a good hygienic regime, with regulated exercise, a balanced diet, and adequate vitamin and calcium intake. A case in point was that of a male patient with severe asthma who had typical case findings of house dust allergy. He refused treatment and was given large doses of a vitamin D concentrate with immediate relief. Another case had been under successful treatment for several months when he began to suffer a recurrence of his asthma. On close inquiry it was found that he was working very hard in spite of a badly damaged heart. Adjustment of his routine immediately relieved his asthma. These cases remind us that in our enthusiasm for active treatment we often tend to overlook such general matters as diet and exercise.

Let us now consider our actual experiences with cases of house dust asthma.

In the past two years we have examined 57 cases in which asthma was the chief complaint. Of these cases, 44, or 77 per cent, were skin-sensitive to house dust and 13, or 23 per cent, gave negative skin tests to dust extracts. Of the skin positive group, 30 cases have been chosen for this report because house dust was considered on the basis of history, physical examination, and skin tests to be the most important allergen, and because these 30 cases had been under observation for at least a year. In this way it was hoped that an estimate might be obtained as to the early results of treatment. All of these 30 cases were sensitive to stock and autogenous house dust extracts, but in only 7 cases was their skin sensitivity limited to house dust. In 11, or 36.6 per cent, foods were also involved; in 6, or 20 per cent, pollen sensitivity was a complicating factor, while in 10, or 33.3 per cent, chronic infection appeared to play a role.

In these cases treatment was largely carried out by desensitization, using an extract of the patient's house dust or dust from their place of work. These extracts were prepared in 3 per cent solution as described by Coca. Dilutions were prepared from this concentrate ranging in strength from one part of concentrate in ten of diluent to one part of concentrate in ten thousand parts of diluent. Subcutaneous injection of these solutions was carried out at the rate of two injections a week beginning with 0.1 cubic centimeter of the weakest dilution and doubling the amount at each treatment. After several weeks the patient was receiving one cubic centimeter of the concentrated extract twice a week. The interval between treatments was then gradually lengthened until they were about two weeks apart and after two or three months at this rate they were discontinued.

In the cases presenting complicating sensitivities additional means of treatment were sometimes necessary, such as dietary adjustment to exclude food allergens; pollen extract treatment in hay fever, and vaccine therapy in cases complicated by chronic infections.

The results of treatment in our cases have been most encouraging. Sixteen, or 53.3 per cent, were completely relieved and 7, or 23.3 per cent, were markedly benefited, making a total of 76.6 per cent who might be considered to have obtained good results. Of the remainder, 3 cases, or 10 per cent of the whole group, received only fair results and 4, or 13.3 per cent, were considered as failures. Of these 4 failures there were two who did not complete their treatment.

As a corollary to our observations in this group of 30 cases, I would like to mention a few of our findings relative to skin sensitivity to house dust extracts in other types of cases.

Some writers have claimed that sensitivity to house dust is relatively common even in normal individuals due to some skin irritant in the extract. Our findings have been otherwise. We skin tested 14 student nurses with our stock house dust extract and found that 4 gave a slight reaction which could not be considered of diagnostic degree. Again, it has been stated that nearly all patients with allergic disease give positive skin reactions to house dust. This has not been our experience. In a group of 35 non-asthmatic allergic patients only 9, or 26 per cent, showed positive skin reactions to house dust. On the other hand, we agree with those who state that house dust allergy is frequently associated with other forms of sensitivity. In our present series of 30 cases there were 23, or 76.6 per cent, who showed one or more positive skin tests in addition to that of house dust.

CASE REPORTS

The most interesting and instructive cases are often those in which treatment is most troublesome and for this reason I wish briefly to present a few of these.

Case 1. A white female, of 29 years, had had uncontrollable asthma for 2 years, commencing at the time of her last confinement. She had a typical history of house dust sensitivity but she also had a chronic sinusitis. Foods did not appear to be implicated nor did she have any hay fever. Skin tests were negative except for marked reactions to house dust, salmon, and stock vaccine. In the belief that the house dust was the chief offender, treatment was commenced with prompt partial relief. Within a few weeks each injection of the extract was associated with increasingly severe reactions and no amount of adjustment of the dosage served to affect these reactions. Treatment was suspended and the infected sinus was drained with some relief. A vaccine was prepared and both the house dust extract and the vaccine were administered, but the reactions soon appeared again and, after futile attempts to control these, treatment was suspended with the asthma unabated. We have not yet attempted dietary adjustment by the use of the leukopenic index in this case as de-

scribed by Vaughan and others, but in view of the promising results obtained by them we think that this method should be given a trial.

This example serves to remind us that any case of allergy presents a difficult, and, at times, an extremely complex problem. No case of allergy should be given the impression that there is any easy road to relief, and certainly not to cure. The allergic constitution, as far as we know, cannot be replaced by a non-allergic constitution and every patient should be prepared for a long and tedious course of treatment.

Case 2. An unmarried white female, aged 35 years, had been repeatedly admitted to the hospital in violent attacks of asthma. A few days in the hospital would completely relieve the attack, but recurrence would follow on her return to her home. The history and skin tests were typical of house dust asthma and treatment gave prompt and complete relief. A year later the patient returned in an acute attack which followed moving into another house. In the meantime she had become addicted to morphine and was completely uncooperative, so further treatment was considered useless.

In this case we see the effect which a change of environment may have on an allergic patient.

Case 3. A white female, aged 21 years, had been diagnosed by her family physician as a case of house dust asthma. She was treated with an autogenous dust extract and obtained marked and immediate relief. However, because she had several severe reactions to her injections, she refused further treatment with gradual recurrence of asthma. We felt that a more judicious routine of treatment would have prevented the reactions which discouraged this patient. Treatment must be administered with the utmost care and with the understanding that each patient is an individual problem and cannot be handled by any rule of thumb. A reaction of any kind is definite indication for decreased dosage; in fact, we feel that one should never induce a reaction and so encourage the physicians in charge of these patients to use minimal and very gradually increasing dosage.

Case 4. A white male, aged 38 years, had disabling asthma while at work in his shop. History and skin tests were typical, and treatment with an extract of his shop dust gave prompt and complete relief. After several months of treatment, the injections were gradually discontinued with recurrence of the asthma. Treatment again gave complete relief.

In this case we see the importance of sufficiently prolonged treatment. The patient is by no means cured when complete relief has been obtained, and the slightest recurrence of asthma should be an indication for prompt institution of further treatment.

Case 5. A white male, aged 27 years, had a typical history of house dust asthma and a typical skin reaction. Treatment gave prompt relief but, following an upper respiratory infection, asthma again developed. A vaccine was prepared and administered with immediate relief.

This case illustrates the point that a patient, either because of a newly acquired sensitivity or because of the lowering of resistance due to infection, may require a change in the method of treatment. The acquirement of new sensitivities is relatively common in allergy and the physician must be on the constant watch for evidences of such a change. This is particularly true of food allergies. In other words, the patient with an allergic constitution is a stage set for many plays and because we find one in progress at one time is no indication that at another time the play may not change. This is often found in taking a history where we may find that the patient has had infantile eczema which cleared up with later childhood, its place being taken by angioneurotic edema, which may have disappeared with puberty, only to be replaced by hay fever, and in later adult life asthma may have developed.

House dust sensitivity is a common cause of asthma and in spite of the fact that it is frequently complicated by other forms of allergy, good results may frequently be obtained by suitable treatment. Whether permanent relief may be expected is questionable but an asthmatic patient is always grateful for even temporary relief, and this should be our justification for treating them. A longer experience in this work is necessary before final judgment will be possible and what that judgment will be remains for the future to tell.

CONCLUSIONS

1. A series of 30 cases of asthma is presented in which house dust was considered the chief causative allergen. Twenty-three cases, or 76.6 per cent, received marked or complete relief on suitable treatment. In 3 cases, or 10 per cent, improvement was slight. In 4 cases no benefit was obtained.

2. Every case of asthma should have a complete history, physical examination, and suitable skin tests.

3. Great care should be exercised in treatment. In no case should treatment be forced to the point of general reactions.

4. The care of a case of asthma is often a prolonged and difficult matter and this should be explained to the patient.

5. Attention to general hygiene, with adequate diet, and high vitamin and calcium intake is an important corollary to specific treatment.

6. Attention should be given to possible changes in the allergic state with sensitization to new allergens.

BALL MEMORIAL HOSPITAL

DISCUSSION

M. K. MILLER, M.D. (South Bend): In evaluating the role of house dust as an atopic substance,

one must exert caution. Anyone who does many skin tests finds tests of house dust that ordinarily with other substances might be considered positive. However, in true, positive cases one meets a typical reaction, and not merely a swelling and a redness which is seen in cases in which the house dust extract acts as an irritant. In evaluating these tests, one should exert more caution than with any other allergen. It is necessary not only to get a positive skin test but to establish a proved clinical connection. This is suggested if the patient improves when taken away from his usual environment, and particularly away from his usual sleeping quarters, or when the symptoms improve if a so-called dust-free room is created for the patient. I think this latter is often helpful. Take a small room and move out all the furniture; have no rugs on the floor, no linoleum or coverings of any sort; take down the drapes and have nothing that will catch dust. Supply an iron bed which can be washed and have the mattress and pillow covered with dustproof material. Many patients who are dust sensitive, will show great improvement with this sort of a regime without desensitization.

Some authors insist on the demonstration of dust sensitivity by means of the passive transfer test. As Dr. Montgomery emphasized, one should always make an exception for any individual offending substance which is a part of house dust mixtures, such as feathers, etc. Recently much emphasis has been placed on the role of fungi or molds in producing a house dust sensitivity. Undoubtedly, if one does enough tests with fungi, he will run across cases which are sensitive only to fungi and not to the unknown substance which is in house dust *per se*. I have seen three such cases within the last few months. The identity of the offending substance in house dust apparently has never been established. It seems to be a definite substance which occurs only in old material. Dr. Cohen, of Cleveland, has done some interesting work in producing a definite allergic substance from material which at first had no allergic properties.

Patients who are sensitive to house dust are often greatly improved by getting new furniture or by changing their environment.

Recently, following the suggestion of Ratner, of New York, we have attempted to study these cases in a very simple way. We get a sample of the house dust from the patient's home from the davenport, from the mattress, rug, etc., and then soak some of this dust in a solution of sodium hydroxide for several hours; then we use that solution for simple scratch tests on the skin.

If the clinical history and skin tests agree, and the patient gets no benefit from a dust proof room, then desensitization treatment is given. I have preferred the intradermal method as we use it in the co-seasonal treatment of pollen cases. In doing this we attempt to produce a wheal by starting with a weak solution. My experience has been somewhat different from that of Dr. Montgomery. I never had much fear of house dust extract in getting reactions. I may have something coming to me, but it has been my experience thus far that reactions have been extremely rare.

Bennett Kraft, M.D. (Indianapolis): Both Drs. Montgomery and Miller are to be congratulated upon their fine presentation and discussion. There is, however, one point to which I wish to call your attention. Lack of time, I am sure, prevented the speaker from mentioning it. Someone has said that we do not live by food alone, and this is proved by the fact that, after we have investigated an asthmatic from the allergic point of view, we often find the psychobiologic reactions of the patient are equally or even more important in the production of the attacks. Besides the reactions to foods and inhalants, we must consider the important bearing which fears, obsessions, frustrations, unhappiness, and strain have upon the patient. Often personality difficulties are of such great importance that they greatly retard or entirely prevent the therapeutic effect of the most approved and indicated antiasthmatic treatment.

For example: A dust sensitive patient continued to have asthmatic attacks long after treatment was instituted. It was noticed that whenever she received an invitation to an out-of-town dance, on the day set, she would develop an attack. On careful analysis of the case it was learned that one of her best friends was killed while driving home from a dance. Whenever she contemplated going to a dance, there developed the conflict between the fear of an accident and the desire to go. She solved this difficulty by a physical dysfunction —bronchial constriction. Someone has said that acute diseases are sent by God, but that we bring chronic diseases upon ourselves. Asthma is the price some of us are paying for being the possessors of finely attuned autonomic nervous systems.

In regard to the reactions following treatment which Dr. Montgomery mentioned, I would like to state that I have always made it a practice to discuss the intended treatment with the patient. The patient then knows that in our attempt to find the tolerance dose needed to obtain therapeutic results, constitutional reactions may occur and that they are concomitant to effective treatment.

Dr. Lall G. Montgomery (Closing): I want to reiterate the fact that an allergic patient is usually not allergic because he is sensitive to one substance. He is allergic because he has an allergic constitution. You may have a child who has one type of allergy early, another type at puberty, and still another in middle life. We are dealing with a complex mechanism that may break out in one place or another. The allergist's problem is not the relief of one sensitivity but it is dealing with the patient over a long period of time as a biological and psychological entity. I have never seen a case that I could identify as a psychological allergy, but I am sure there are such cases.

PERNICIOUS ANEMIA AND ITS TREATMENT*

PAUL J. FOUTS, M.D.
Indianapolis

Pernicious anemia is one of the few diseases for which we now have a specific and, in many ways, spectacular treatment. At the present time there seems to be no reason why a patient having pernicious anemia, who does not have extensive spinal cord involvement and who receives with regularity at all times sufficient potent material, cannot live out his normal life expectancy. In addition, early diagnosis followed by adequate treatment can prevent the development or the advancement of the subacute combined systemic disease.

The disease involves not only the hematopoietic tissues but also the central nervous system and the gastro-intestinal tract. Any one of these tissues may be involved first and more extensively than the others. Minot examined 100 cases of pernicious anemia as to the frequency of initial symptoms and found that 33 first complained of generalized weakness, 31 of gastro-intestinal symptoms, 26 of symptoms referable to the central nervous system, and 10 to the circulatory system. After the onset of symptoms, the average time before the diagnosis was made was much shorter in the patients having first weakness and cardiac symptoms than in those having gastro-intestinal and neural symptoms first. The anemia itself is largely responsible for the weakness and the cardiac symptoms, and this apparently accounts for the difference in time required for diagnosis.

We shall first consider the anemia. The symptoms referable to the anemia are the same as those associated with any anemia—weakness, dyspnea, palpitation, pallor, etc. In pernicious anemia, the bone marrow is arrested at the megaloblastic stage. The result is that the bone marrow is filled with red blood cells which cannot be released until the liver "active principle" is supplied. The cells getting into the bloodstream are large and well filled with hemoglobin; that is, there is a macrocytic hyperchromic anemia. This can be demonstrated by examination of the fixed smear and by finding a high volume index or high color index. In addition to the above findings, the blood bilirubin is increased and the reticulocytes, white blood cells, and blood platelets are decreased in number. The polymorphonuclear leukocytes are larger than normal and tend to have many lobes to their nuclei. When the patient receives potent therapy, the symptoms due to the anemia disappear and the bone marrow findings and the resulting blood picture rapidly return to normal.

In true pernicious anemia there is always an achylia gastrica, which precedes the anemia, often by many years, and persists after therapy. This is a permanent condition. Examination of the gastric contents reveals a very small volume and an absence of both acid and peptic enzymes. The gastro-intestinal symptoms—sore mouth, with red beefy tongue, indigestion, loss of appetite, abdominal pain, and recurring diarrhea or constipation—usually improve markedly on liver therapy, but some patients require fairly large doses of dilute hydrochloric acid before these symptoms entirely disappear.

The central nervous system involvement is the most serious and the most permanently incapacitating part of the disease. Involvement of the spinal cord has been reported in as high as 90% of the cases of pernicious anemia. It is generally agreed that more than 70% of the cases exhibit neurological manifestations. We recorded the incidence of the various neurological signs and symptoms of 115 patients reported several years ago from our laboratories. The most common and the earliest symptom referable to the nervous system is paresthesia of the extremities. Evidence of involvement of the cord may be confined to these paresthesias, but the damage may be so extensive that the patient may be completely paralyzed. The character of the signs depends upon whether at the time of the examination the changes in the posterior or in the lateral columns of the spinal cord predominate. If the posterior columns are involved most, the reflexes are diminished or absent, while if the lateral columns are affected, the reflexes are hyperactive, the extremities spastic, and patellar and ankle clonus are present, along with positive Babinski, Gordon, and Oppenheim.

Prognosis as to improvement of extensive cord involvement must be guarded. In evaluating the improvement in central nervous system involvement following the therapy you must first determine the involvement after the blood has reached normal and the general condition of the patient has improved. The improvement, and this may be marked, in the symptoms referable to the central nervous system during the time the blood is returning to normal is due to the improvement in muscular strength associated with the general improvement in the patient and is not due to relief of actual nerve damage.

It is generally agreed that parenteral therapy is the most advantageous for patients with neurological involvement. This type of therapy is indicated in these patients not only because of the neural involvement, but also because the patients in this group are more apt to have infectious and degenerative complications than are the patients not having neurological involvement. We have had no advancement in cord involvement while the patients received adequate parenteral therapy and have even noted improvement in some cases on this therapy. Several other clinics have reported similar findings. Better results may be expected in the treatment of the younger individuals not

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having complications and in those patients whose cord involvement is of short duration.

Patients having pernicious anemia must receive sufficient potent medication regularly at all times. This is especially important in the prevention of increase in neurological involvement, as every time the blood count decreases, there is apt to be an increase in neurological involvement. The amount of medication required by patients varies from patient to patient and in the same patient at different times. The older patients and the patients having advanced cord symptoms, arteriosclerosis, infectious or degenerative complications, kidney damage, or persistent diarrhea, are more apt to require greater quantities of medication than the younger patients and those not having these complications. Even extreme worry may increase the requirement of liver extracts. Exacerbation of any of the above complications may increase the requirement of liver extract and, unless the dose of liver extract is increased, may lead to a severe relapse, even though the blood has been maintained at normal levels for a prolonged period of time by a given amount of liver extract. This makes it imperative that frequent examinations of the blood be made. Although many patients can be adequately treated orally, the parenteral therapy is simple and, in addition, the doctor is able to have better control over the patient. In patients having infection, diarrhea, vomiting, marked cord involvement, or in fastidious patients parenteral therapy certainly is the method of choice.

In the average case without complications, the daily administration of 3 to 4 vials of powdered liver extract, 12 capsules of "extralin" (liver-stomach concentrate, Lilly), or 30 to 40 grams of whole stomach will be followed by a satisfactory response of the blood. There will be little or no clinical improvement in the patient during the first four or five days. By then the reticulocytes, or young cells, should start to increase and there should then be a very marked improvement in the clinical condition, although the total red blood cell count may not have increased or may have even decreased slightly. The reticulocytes reach their peak from the eighth to the tenth day and then the red blood cell count starts up. At the end of one month, the red cell count should be in the neighborhood of 3.5 million and after two to two and one-half months of therapy, should reach normal. The red cell count should then be maintained in the neighborhood of 5.0 million.

If it is decided that parenteral therapy is indicated, the patient should receive at the beginning of therapy 3 or 4 daily injections and then injections at weekly intervals. The intravenous injection has no advantage over the intramusclar. The size of the injection varies with the preparation used. Some of the very concentrated preparations can be given in 1 cc. doses, while others require from 3 to 10 cc. After parenteral therapy the reticulocyte response appears a few days earlier, the peak usually being reached on the fifth to the seventh day. The rise in red blood cells is slightly more rapid, the 4.0 million level usually being reached at the end of one month. Following a month and a half to two months, the red blood cell count should be normal. In an occasional case, the rise in red cells is so rapid that the hemoglobin lags behind the red blood cells. In such cases iron should be administered. In a few patients it is difficult to get the red blood cell count over 3.5 to 4.0 million without the addition of iron.

As to the maintenance dosage in patients receiving parenteral therapy, it has been our observation that most of the patients require weekly injections. It so happens that most of the patients whom we have been treating with parenteral therapy are very difficult to maintain with normal red blood cell counts. The patients without complications who are easy to maintain have been receiving oral preparations. This probably accounts for the need of frequent injections. In addition, many of our patients do not receive good diets, which may also increase the requirement of liver extract. No matter what type of therapy is used, the patients should eat a good nutritious diet containing plenty of fresh vegetables, red meats, and eggs.

When in doubt, more rather than less liver or liver substitutes should be given, as too much cannot be administered and it is imperative that sufficient material for the individual case should be administered at all times.

In concluding, I shall quote Dr. Minot, who states that "Failure of liver therapy in a case diagnosed pernicious anemia implies inadequate treatment, an incorrect diagnosis, or the existence of complication sufficiently serious in itself to be disastrous for the patient."

DISCUSSION

B. G. Keeney, M.D. (Shelbyville): The research in the anemias has illuminated the anatomy and physiology of the erythron by which term we designate the circulating blood and the organs from which it arises. Red blood cells are born in the bone marrow. In the embryo and fetus all marrow is red, but gradually with age, it is substituted in large part by yellow. The stroma is a sponge-like network of lattice fibers in the meshes of which are free cells, the majority of which are young forms of the myeloid elements, the granular white cells. The characteristic features of its circulation are thin walled vessels called sinusoids. Between these large patent venous sinusoids extend numerous intersinusoidal capillaries in which are found foci of red cells in various stages of development. These red cells originate probably from the lining endothelium of these capillaries. The first germ cells are larger than those cells of subsequent generations and, therefore, derive the name megaloblast. Its protoplasm is homogenous and basophilic. By mitosis these cells differentiate and mature in response to the anti-anemic factor which is elaborated by the synergistic action of an

extrinsic factor in the diet on an intrinsic factor in the walls of the stroma and stored in the liver.

The anti-anemic factor stimulates the production of the cells and the stroma of the cells produces the hemoglobin which increases in quantity as the cells differentiate. Since hemoglobin has an affinity for acid stains, there is a gradual change from the basophilic germ cell through a polychromatism to the intense pink of the mature generation circulating red cells. Also the cells moderate in size from the megaloblast to the much smaller, uniformly round erythrocyte.

There is not this orderly generation and sequence of cells when there is a deficiency of the anti-anemic factor stored in the liver. Due to the small number of red cells in the peripheral blood, there is an anemia and in response a flux of immature cells into the blood stream.

Since the stroma of the cell metabolizes the hemoglobin and the impetus to mitose, differentiate, and mature is impaired by the absence of that anti-anemic factor the slide picture of these cells is macrocytosis, hyperchromia, anisocytosis and poikilocytosis.

The volume index and the color index are consequently above normal.

Pernicious anemia is a disease of adults and may be diagnosed quite as much from symptoms as from blood findings, fatigue, periodic sore tongue, especially a burning of the anterior end. In fully two-thirds of the cases there is a glossitis.

The many investigators who always make gastric analyses emphasize the postulate that in Addison's disease there is always an absence of hydrochloric acid in the gastric secretion and upon the remission of symptoms under treatment, the hydrochloric acid never recurs. Castle suggests that the lingual symptoms are dependent on the same gastric physiology that produces the achylia.

Sturgis, Wintrobe, Minot, Castle and other research workers in their literature justify the statement that in fully 70% of the cases there are neurological symptoms of peripheral or central types. Numbness and tingling of the extremities are classical and the exhibition of central lesions ranges from marked neurasthenia to suicide.

Two of my own cases confirmed by reputable diagnosticians committed suicide.

Because of its inability to store and subsequently to release its hemopoietic substance, Ivy suggests that it is liver damage that precipitates macrocytic anemia.

We pronounce another triad of syndromes, a triad always present in pernicious anemia: macrocytosis, burning tongue and achylia; numbness and tingling of the extremities.

All these symptoms remit upon the adequate administration of liver or stomach therapy. The therapy as presented by Dr. Fouts is a creed and the dictum stands that any anemic syndrome that does not remit upon therapy is not pernicious anemia.

WHAT CAN THE WOMAN'S AUXILIARY CONTRIBUTE TO THE PRACTICE OF MEDICINE?

CHARLES P. EMERSON, M.D.
Indianapolis

There are many things concerning this subject which might well be said, and said, might easily be misunderstood. If any of the suggestions made seem unreasonable, please attempt to construe them so that some benefit may result.

First, allow me to congratulate the ladies of this Auxiliary for their already accomplished splendid organization, and, in the name of the Indiana State Medical Association, to express our gratitude for the excellent assistance you have already rendered us. All new organizations must at first feel their way along; the best of preliminary plans never entirely stand the acid test of experience; some reconsideration of aims always is desirable. We judge that this organization has now reached that stage in its evolution, and if we in any way may assist you in straightening your course toward successful goals, we shall be more than proud that it was our privilege to meet with you, for this auxiliary has the potentiality of being of the greatest assistance to the Indiana State Medical Association.

Perhaps you will allow a few words of personal experience. Among our best friends are the many physicians who as students and young practitioners during the more than thirty years that we have taught medicine have confided to us their problems. Since the early days of modern medical practice it has been recognized that the thirty or forty years during which each young doctor hopes to practice his profession, the standing he is to enjoy during the last twenty or thirty of them depends on how far he has developed upwards during the first decade. If these ten years were well spent, granting that his health remains good, he later need fear little for his professional success. Rival physicians may open their offices on each nearby corner; state medicine, like a destroying deluge, may sweep over the land; non-medical cults may gain in strength; but he is fairly secure. During these first ten years the young doctor has much to learn, and first of all how to practice honorable medicine. He has the real confidence of his community to win; he has his medical affiliations to make, and this is very important. During this decade he should willingly assist, rather than try to rival, older men whose reputations are secure, and in the choice of these friends and associates his wife, thanks to her intuitions, often will be wiser than he. And, finally and most difficult, it is during this early period that he learns to keep abreast of the rapidly

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flowing stream of medical progress. This means that he must acquire, and it is not easy, the habit of reading his medical journals as soon as they appear; must attend all desirable medical meetings; must attend post-graduate clinics, etc. One of the greatest misfortunes a young physician can have is a busy practice and financial success during these first ten years, for such deprive him of the opportunity and desire to "grow up" into his practice. The end of this decade finds his intellectual development where it was when he first opened his office; and, worse than that, his mind is no longer plastic; his ideas concerning the treatment of diseases which he gained during his medical course have become too firmly fixed. At the end of these ten very successful years he must begin to struggle harder and harder to hold his position in his medical community, for many younger men will begin to challenge it.

INFORMAL MEETINGS

We believe whole-heartedly in the early marriage of young physicians; we feel that one of the greatest drawbacks of the medical profession is that so often it leads them to take that step late in life. Nevertheless, with its so great advantages, early marriage has also some disadvantages, which, however, with foresight can be largely overcome. Right at this point is where your auxiliary may for the young physicians be either a great help or a disturbing factor. The wives of the justly prominent members of the medical profession are said to come to these meetings too fashionably and expensively dressed; in some states the auxiliary gatherings are a little too formal. The result is that the wives of the younger physicians on these occasions struggle for their husbands' sake to make the best appearance of prosperity that they can; and whether they give utterance to their dissatisfaction or not, they are likely either to decide to stay away from future auxiliary meetings or to stimulate their husbands to greater efforts in the financial aspects of his practice. We are now speaking for the benefit of the young physician who has not yet paid for his car; who still has installments to pay on his office equipment. Medical auxiliaries might well make these meetings as democratic and friendly as possible. Young doctors and their wives find plenty of the above mentioned rivalry in the local communities in which they live. At these gatherings, however, it can reach intensely acute grades, discouraging the young physician in his efforts to move slowly but surely upward, rather than merely forward. The suggestion also is made that you cordially invite to your meetings the wives of the many excellent physicians who have not joined the Indiana State Medical Association. You may by this method be the indirect means of converting the latter. We need them.

SOCIAL AFFILIATIONS

Medical politics is one of the most dangerous of the avocations of physicians; yet since we Americans live in a society the fundamental organization of which is political, our profession cannot escape. State medicine is threatening us; hostile medical cults are trying through political means to exploit the already prejudiced public; and only in the political arena can both dangers be averted. One point, however, the medical profession has learned: that it should enlist for this service, not its best politicians, but its men with best recognized professional ability. It is for this reason that medical auxiliaries as such should not directly engage in any political activity, since they cannot present the medical side with authority. There are, however, ways in which the auxiliary can be of great assistance politically. Practically all of you belong to some other organizations or clubs which have legislative committees. In your own fields you can speak with authority. Some of you are graduate nurses; others are trained social workers. Both groups have nation-wide organizations. The majority of you belong to federated women's clubs and parent-teacher associations. These always exert a powerful influence over legislation. On the proper committees of these clubs the wives of physicians might well enlist for active service. President-Elect Edmund D. Clark of our association urged that this point be made. Unfortunately, we are told, doctor's wives often shun such committee work on the grounds that it is not fitting for them to be thus active; nevertheless, it is a well known fact that among the members of your clubs are the wives of hostile nonmedical practitioners who seek membership on such committees and who, therefore, exert a strong influence in favor of legislation hostile to the medical profession.

EDUCATION OF PUBLIC

The great need of the public is education in the truth concerning the cure, control, and prevention of disease. In this field the auxiliary can prove most helpful. By teaching the public the value of excellent medicine they can do far more to defeat hostile legislation than by any direct political action. The public never seems to realize, because they are so often told otherwise, that the members of the State Medical Association ask nothing which benefits them directly or indirectly; on the contrary, that which doctors so insistently demand always tends to eliminate disease and, therefore, to lessen medical practice. This educational problem may be approached in various useful ways. The Wisconsin Auxiliary, I am told, organizes classes among its own members who study various aspects of social medicine, mental hygiene, the problems of state medicine, poor relief, etc., and that later its local branches, working under the direction of the proper committee of the State Association, organize and sponsor public meetings, demonstrations, exhibits, for community education in these subjects; also, that they maintain a bureau through which lay organizations may obtain suitable speakers for their meetings.

HYGEIA

Another effort along educational lines is the wider dissemination of *Hygeia*, the excellent journal published for the laity by the American Medical Association. The Michigan Auxiliary, I am told, has been most helpful in this particular. President Sensenich suggests that this Auxiliary make determined efforts along this line. The members of the auxiliary in some states, we hear, have objected "to canvassing for subscriptions to a magazine." Possibly other more suitable means can be devised for distributing such medical literature among those naturally friendly to our profession. On two occasions ladies belonging to the Christian Science Church have asked, and one almost demanded, the privilege of distributing Christian Science literature among the patients of hospitals under our control. They certainly did not lack in courage.

HEALTH EDUCATION FOR CHILDREN

The proper education of the child in matters of health is not a problem for the home alone, all-important though that may be. The advice of father and mother should in the public schools receive that foundation of the sciences which must underlie all successful health measures. Certainly, accurate elementary knowledge concerning the control of diseases is as much a problem of public instruction as are the preliminary courses in the industries, farming, domestic science, and engineering which now appear in the school curriculum. May I reminisce briefly? For fifteen years, and this I am told is the record length of time, the Emerson-Betts text-books on Health and Hygiene have been the official text-books in the public schools of Indiana, and no other books on this subject have had nearly the extensive use throughout the country as have these. But what was the material we were allowed to present in these text-books? Could we speak of the danger of certain diseases? No. So potent is the influence of the nonmedical cults in all the states of this Union that we could scarcely mention diseases; we were asked to speak only of health, and the ways in which this may be fostered in a healthy child. The only exceptions to this was a chapter on the danger inherent in the misuse of alcohol and of tobacco, which we were instructed to emphasize. True, these are very important subjects, but important also are the dangers inherent in such diseases as tuberculosis, typhoid fever, diphtheria, etc. But why such strength of opposition to more than the mere mention of disease in school text-books? Because well organized state and national societies, opposed to medicine, object. And why the strong emphasis on the dangers of the abuse of alcohol? Because the Woman's Christian Temperance Union, a strong national organization, insists, and rightly. The moral of this statement is self-evident. A nation-wide organization of your medical auxiliaries could easily, and should, develop strength enough to require that better balanced text-books be placed in the hands of school children. Since some of these same children later will be our legislators, the committees of the State Medical Association in years to come will not have as discouraging a task as now, when they advocate better laws favoring public health and medical practice.

Finally, in other states the medical auxiliary proves very helpful to the State Association in several fields into which the physicians themselves can enter only with difficulty. They study problems of public hospitalization, its proper uses and its abuses; the problems of poor relief, etc. Also, the committees of the Auxiliary could enlist and direct the activities of the many church guilds, some of them already of great service in making more contented, through their personal visits, the patients of tuberculosis sanitaria, children's hospitals, etc. The members of the auxiliary, of course, could themselves undertake such activities did they desire; but it is much better that they enlist, encourage, and guide the many young people who desire just such outlets for their sympathies but do not know how to go about it.

These few suggestions perhaps will suggest to you other and better plans, but whatever you may undertake, remember that the activities of your Auxiliary can be of inestimable value to the Indiana State Medical Association.

907 Hume Mansur Bldg.

HEMATURIA — BALCH-WISHARD

(Continued from page 18)

misinterpreted propaganda for intravenous urography, unless the findings are substantiated, if not clean cut, by retrograde pyelograms.

William N. Wishard, Jr., M.D. (Indianapolis) (closing): About continued hematuria, none of us very often see patients who are bleeding for the first time. They are patients who have bled over an extended period of time. While such bleeding may not be serious in a case of enlarged prostate, it is very serious from the point of view of a bladder or kidney tumor.

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JANUARY, 1937

EDITORIALS

THE PROBLEM OF SYPHILIS

Medical literature teems with material having to do with a subject which has become a national problem, the eradication of syphilis. We have had much to say and will have more to say about it. Surgeon-General Parran has made it plain that this is to be the major activity of his department and, therefore, it becomes the duty of the medical profession to enter into the fight with might and main. Now that the campaign is on, the whole thing seems to have been deposited in the lap of the profession, and many states already have promised every possible assistance.

It is entirely possible to control syphilis, for it has been controlled in several countries, notably those of Scandinavia.

The medical profession alone can not undertake such a task, nor is it expected to do so. Already several metropolitan newspapers have entered the fray and are doing yeoman service. Court officials, too, have indicated that they are cognizant of present conditions and are willing to do their bit toward calling the attention of the public to the fact that we have a most dangerous foe in the disease syphilis. In a recent edition of the Chicago *Tribune* appeared a story telling how Judge Schiller, of the Morals Court in Chicago, had his attention called to the matter, and as a result he ordered seven women who had been brought before him to be examined. Four of them were found to be infected with syphilis; two were infected with gonorrhea. The judge was greatly interested in the finding and made it clear that such examinations would be continued indefinitely. The newspaper quoted him as saying, "I am convinced that much can be done to stop the spread of syphilis by having these people examined and providing treatment for them if they are infected. . . . Saturday I expect reports from the forty examinations given last Monday, and if the percentage of infections is as high as it was in the first group examined, Chicago had better open its eyes and begin a vigorous campaign against this modern plague." Of course, Chicago is no exception; the same conditions are sure to be found in any large center of population.

We have said that the whole matter has been placed in the lap of the medical profession, and by that we mean that any campaign for the control and eradication of any diseases must depend principally upon the cooperation of the medical profession. However, in this instance, the first step must necessarily be a campaign of education of the public. The public must be advised of the wide spread of this disease, and the seriousness of it. They must have it made plain that syphilis is responsible for many of the ills that beset us and that as a cause of death it ranks right along with illnesses much better known.

From time to time it has been pointed out that only a few years ago the so-called venereal diseases were never mentioned in polite society; if they were discussed at all, it was behind closed doors. This is no longer true, fortunately. Venereal diseases are more freely discussed by the lay public, and there is a growing demand that something be done as a control.

The next logical step probably will be the reporting of all cases of syphilis. If all such cases were reported for a period of six months, the public would be aroused to such a pitch as to demand that something be done about it. During the World War the Federal Government asked that reports of venereal infections be made at once, as part of a campaign to control them. Physical examinations of draftees brought to the attention of the United States Public Health Service for the first time the fact that our country was over-run with venereal infections. However, since that time, little interest has been manifested, and most physicians ceased to make reports of these cases.

Indiana is one of the many states pledged to support Surgeon-General Parran in this campaign, and it now becomes our duty to carry out that pledge. All physicians know the ravages of syphilis; they all know that syphilis is an important factor in many of the diseases they are called upon to treat; they all know that our state hospitals are filled to overflowing with patients who are there because of syphilis. Physicians also realize the huge costs to the state of caring for these patients, and they are aware of the various economic aspects of the disease. Also, physicians know that its control and its eradication is wholly possible. Thus there is every reason for this campaign and for physicians to put their shoulders to the wheel.

The lay public continues to look to the medical

profession for control of all matters pertaining to the public health, and our standing in that respect is not due to the fact that we assist the sick but that we keep them from getting sick. Active assistance in this campaign against syphilis will bolster our position.

The Indiana State Medical Association has a new committee on syphilis, appointed at the request of Surgeon-General Parran, whose members are Dr. F. R. Nicholas Carter, of South Bend, chairman; Dr. Minor Miller, of Evansville, and Dr. E. O. Nay, of Terre Haute. The committee has met and sent a report upon conditions in Indiana to the Surgeon General. A meeting of health officers will be held in Washington before January first when the recommendations of this committee and similar committees from other state medical organizations will be considered. A report upon that meeting will be made later.

THE LEGISLATURE

The biennial session of the Indiana legislature convenes on January 7, 1937, and like other citizen groups, the medical profession is interested in what will take place during the ensuing sixty-one days. We commented upon this subject in the September JOURNAL, and upon re-reading that comment there seems to be no reason for altering the opinions expressed. The election, then quite an issue, has come and gone, and the "ins" have again been returned to power with a bit more majority in both Senate and House than in the last regular session. This, of course, means that party measures will be carried through with negligible opposition.

A survey of the make-up of the 1937 legislative assembly indicates that little or none of what has been termed "fool legislation" may be expected, for the majority of the members are now of the seasoned type and know their way around. This, together with the fact that but few changes have been made in our legislative committee, gives every confidence that the medical profession of the Hoosier state will fare very well during this session. The new chairman of our legislative committee, Dr. Norman Beatty, was for several years connected with the Indiana State Board of Health and is familiar with the things that go on during a biennial session. Judging by grapevine reports, both houses will be organized with excellent men at their respective heads. All of this means that any responsible group of Indiana physicians may be assured of a hearing upon any matter pertaining to themselves.

It is vitally important that the component societies lend every effort toward an intelligent consideration of all matters pertaining to public health, both by the legislators and the medical profession. The public long since has come to believe, despite things said to the contrary, that the chief concern of the profession of medicine is the prevention of disease and the preservation of public health. The public believes that it is necessary to do no more than to sell the idea to the legislators. The Association's committee cannot be expected to carry out such a program without aid; they must have the active support of every county medical society in the state. It is presumed that all county societies have named their legislative committees and that these groups have been functioning and will continue to do so.

The national election is a thing of the past, and the headaches and the gloatings are forgotten; it now remains for us to take up the various problems that confront the state and nation and buckle down to their solution. Every member of the impending session is known to some doctor or doctors, and these contacts will give us an opportunity to present our side of any medical or health problem that may come before them. Personal contacts are best, and if you are advised that a member-friend of yours is not exactly certain as to the merits of a measure in which we are interested, and your legislative committee advises you of this, it becomes your duty to get into personal contact with this man and discuss the thing with him. It is better if this can be done at his home while he is on a week-end vacation from his duties, but if this is not possible then it should be considered a privilege for you to run down to Indianapolis and have a frank chat with him.

Insofar as we have been advised, the medical profession seeks no changes in our medical laws at this time; all we wish and all we can hope for is that matters be left as they are. Health authorities are generally agreed that Hoosier health is in a prosperous condition, and well enough should be let alone. However, if bills inimical to our better interests or in any way derogatory to health conditions of our people are proposed, then we shall have to enter objections thereto and fight against their passage.

If you are not already acquainted with your local representatives in the coming legislative assembly, better make such an acquaintance now; it will enable you to make a more direct approach in case such a contact is needed.

OUR STATE HOSPITALS

The housing and care of the mentally sick in our state is a problem of great proportions, and one that is commanding attention from our administration officials as well as from the medical profession. While it is true that we need some changes in the time-worn laws relating to these unfortunates, the greater problem is one of proper housing, for with the present crowded conditions, it is impossible to render the most effective service to the inmates.

Dr. Max Bahr, long-time student of psychiatric problems and for the greater part of his long pro-

fessional life connected with the Central Indiana Hospital, at Indianapolis, is quoted in the Indianapolis *News* for November 23, 1936, and he pointedly refers to the need of another hospital and recommends that it be located in northern Indiana, probably Lake County, since it is the most populous center in that section of Indiana.

Present state hospitals for the mentally ill, in addition to the Central Indiana Hospital in Indianapolis, are located at Evansville, Madison, Richmond, and Logansport; thus, the southern half of the state is thoroughly cared for with four institutions, and only one is logically situated to care for the more densely populated section of Indiana. It is pointed out that if and when the patients from the Julietta hospital, a Marion county institution for mental unfortunates which is being discontinued, are transferred to the Central Indiana Hospital, as they should be, two new buildings will be required, at a cost of a half million dollars, plus an added annual expense of something like $80,000 for operating costs. Even then the problem would not be solved, for the Logansport hospital is over-crowded and there is reason to believe that this unpleasant situation will increase rather than abate as time goes on. It would seem that there is no sensible alternative, other than to build another institution and build it somewhere in northern Indiana.

A comparison of the reports of our state hospitals with those of other states leads us to the conclusion that Indiana does very well by her mentally afflicted, and we would very much like to see the present program continued. It can be properly continued only by supplying adequate housing for these patients.

Dr. Max Bahr has acquired an enviable reputation in his field, and he has been such a devoted student of the economics that pertain thereto that the State of Indiana can well afford to listen to his recommendations and profit thereby.

CANCER OF THE CERVIX

Too many patients, and physicians also, take a fatalistic attitude about the ability to cure cancer of the uterus, especially of the cervix. A teacher of gynecology recently lamented to a group of his colleagues that, after talking to a large group of practitioners for an hour and a half on the curability of the early diagnosed cancer of the uterus, three physicians came to him afterwards and asked him confidentially if he really thought that cancer of the uterus was ever cured. This teacher concluded that if a practitioner had been out of medical school ten years and was not cancer-minded, one was wasting time trying to convert him, and that it is necessary to concentrate cancer consciousness chiefly on the medical student and the young practitioner.

The greatest problem of cervical cancer today is early diagnosis. Too often there is neglect in coming to the doctor on the part of the patient who knows something is wrong. Too often there is careless disinterestedness on the part of the physician who sees the patient first; either a physician should be prepared to make an accurate diagnosis of a condition or leave it entirely alone and let a physician, whose ability and facilities are adequate, see the patient. Unfortunately there are many instances where on the first examination by a physician the disease is far advanced. To correct this, periodic examinations of cervices, even if symptomless, seem the only solution.

There is as yet no good evidence that the primary cause of cervical cancer is cervical injury or infection and that treating these will prevent cancer.[1] The most important predisposing factor apparently is a constitutional one, perhaps a racial or more likely an endocrine. At the present time there is no way to tell who will have cancer of the cervix and who will not. Many patients with cervical cancer are below thirty years of age, many have never been married, had children or had any evidence of cervical infection. For many reasons, a torn and infected cervix should be repaired and healed and no doubt a most important one is to make less likely the appearance of cancer in the woman who has a constitutional predisposition to cancer. There should be no false security that a treated or repaired cervix will not develop cancer. We have learned to assume that any woman in the childbearing age who develops an amenorrhea is pregnant until proved otherwise. It would be equally wise to assume that irregular and abnormal bleeding in women of any age means cancer until proved otherwise.

In the treatment of cancer of the cervix at the present time in the light of our present knowledge little improvement in results can be hoped for except in the better application of the methods now used to an earlier recognized condition. In the past there have been in competition the surgical and the radiation treatments. At the present time the surgical treatment has been discarded in most American clinics except as recommended by Curtis and Gellhorn for the better application of radium. Likewise some of the European clinics where surgery has been used are apparently abandoning their as-nearly-as-possible perfect hysterectomy technique for the more satisfactory radiation therapy.

It is no doubt a fair example of the attitude of American gynecologists that in the clinic of Floyd E. Keene of Philadelphia radiation treatment has been used exclusively for the treatment of cervical cancer since 1921 and that in an editorial to the

[1] McGlinn, John A.: Can the Mortality and Incidence of Cancer of the Uterus be Reduced. *Am. J. Obst. and Gynec.* 29: 5 (May) 1935.

[2] Crossen, H. S.: Treatment of Cancer of the Cervix Uteri. Am. J. Surgery. 27: 3 (March) 1935.

editor of a series of articles on the treatment of malignant tumors, H. S. Crossen[2] of St. Louis states that because "An advance has been made in the treatment of cancer of the cervix, which gives the patient a definitely better chance of cure than the most radical operations by the most experienced operators" he declined to prepare an article for publication on the technical features of the radical operation for cancer of the cervix.

No doubt the technical features of the Wertheim hysterectomy can not be perfected further than has already been done by Victor Bonney of London, England, and by William Fletcher Shaw of Manchester, England. In a recent report, Bonney[3] discusses 483 such operations. There was an operative death rate of 14 per cent. For the first hundred it was 20 per cent, for the last two hundred it was 9.5 per cent. Bonney's operability rate was 63 per cent. His cures based on a five year period were 25.6 per cent; on a ten year period they were 18 per cent. The average surgeon doing gynecological operations can not hope to approach Bonney's primary mortality figures nor his percentage of cures. It must be remembered also that the cases were selected for operation while every case can be treated by radiation, and should be, for it is not always evident which case will respond to treatment. The treatment of the early cancers by radiation will give good results, and of great importance with proper management, there should be no primary mortality. In his closing discussion Bonney states: "One cannot look into the future, but I think it is quite possible that we shall one day see the end of surgery as a treatment of carcinoma of the cervix." At a 1936 Clinical Congress of American surgeons, Shaw made a report very similar to that of Bonney but compared with it a series of cases treated by radiation. His conclusions were that radiation should and would supplant the radical operation. If such master surgeons will forsake the operation, there is little left to be said for it.

In the cervical cancers classified as group I, the complete operation compares well with radiation but in the other groups radiation results are far superior. Considering the primary operative mortality, radiation should be the choice for all types.

Radiation includes deep x-ray irradiation and the application of radium. Radiation treatment is only as good as its application. Half-way measures by either surgery or radiation are valueless. Best results will be had by the close cooperation of the pathologist, the gynecological surgeon and the radiologist.

[3] Bonney, Victor: The Treatment of Carcinoma of the Cervix by Wertheim's Operation. Am. J. Obst and Gynec. 30: 6 (December) 1935.

EDITORIAL NOTES

Counties with 100% Paid-Up 1937 Memberships:
Carroll County
Switzerland County
Whitley County

Now is the proper time to line up programs for the spring meetings of your district society, since most of such meetings are held in April or May. By all means, advise headquarters office as early as possible concerning the date selected, so that every effort may be made to avoid having a conflict in meeting dates. Your officials will appreciate this very much.

The announcement of the program for the Secretaries' Conference to be held in Indianapolis, January 31, is published on page 35 in this issue. A good many of our members are under the impression that this meeting is only for secretaries and presidents of county societies. However, any member of the Indiana State Medical Association who wants to attend the meeting will be welcome.

E. O. Harrold, of Marion, occupies a page in the *Journal of the American Medical Association* for November 28, 1936, to very good advantage in a discussion of what he believes to be the folly of too much water. He feels that we are too prone to order excessive amounts of water for our various patients, and he makes a very good case of it. His article is humorous and very readable, and it is especially recommended for those of the profession who are continually harping on "more water for every patient."

A statement appeared recently to the effect that in 1935 eighty-eight per cent of all cases in Veterans Administration hospitals were there for treatment of non-service-connected disabilities. It would be interesting to know just how many of these patients were indigents. We still have in mind the person drawing a salary of slightly less than four thousand dollars per year who was cared for in one of these hospitals rather than patronize those who were responsible for his comfortable income.

Our new president starts the New Year with an excellent list of committee assignments which appears in this issue of THE JOURNAL. Dr. Clark

points out, however, in his presidential page, that every member of the society is a committee of one on "the good of the order." Time was, and not so far in the past, when committee assignments were taken as a sort of an honor, a thing much to be desired but one that meant little or nothing to do; the chairman usually assumed whatever burden there might be connected with the appointment. Not so, these days; committees in the Indiana State Medical Association are busybodies and a laggard soon finds himself out of place, as well as out of a job.

For years we have been receiving reprints of original articles through the generosity of our friends, but this morning's mail brought with it a new idea. It is a booklet, the usual 5 by 8 inch reprint size, twenty pages long, and presents "A New Aspect of Cause and Treatment . . . " The booklet is copyrighted, and a note attached inside the cover indicates that a book review is expected, and the price of the booklet is quoted at twelve cents. It was no surprise to find that references at the bottom of the first page gave information concerning when and where the author graduated, where he served his internship, and his society affiliations. It also was no surprise to find that three of the eight references at the end of the article are to the author's own previous publications. This may be a new way of attempting to make the consumer pay for advertising, but it doesn't appeal to us. We have consigned the whole thing to that famous round file.

Press reports recently carried a story concerning a ruling of a New York State court to the effect that corporations can not legally engage in the practice of medicine. Specifically this was directed against the Life Extension Institute which organization has for some years been extending its medical activities. It is our understanding that they primarily set out to check on the health of policy holders of some of the larger insurance organizations, but recently they have gone far afield. We believe that this ruling, bolstered as it is by similar rulings of other state courts, notably that of the Illinois Supreme Court in a recently decided case, will have a very wholesome effect on the tendencies of various groups and corporations to invade our territory. The New York court held that physical examinations, even when unattended by treatment, come within the meaning of the law. The *New York State Journal of Medicine* for November 15, 1936, in commenting on the decision, remarks that such examinations are better done by the family physician than through corporation channels. At any rate, a legal precedent has been set for matters that are certain to confront us at some future time.

January is a busy month in Association circles, what with the mid-winter meeting of the Council and the Secretaries' Conference being set for that period. The former is one of the most important business sessions of the entire year, since the Council covers the gap between the annual meetings of the House of Delegates. An added interest to the Secretaries' Conference, this year, is the opportunity to hear Gordon Heyd, president of the American Medical Association. Dr. Heyd, always a forceful speaker, has a vast knowledge of medical affairs, for years having been very active in his home state of New York as well as in A.M.A. matters. This meeting is open to all Association members and a record attendance is anticipated. Due announcement of the program is given in this issue of The Journal.

A few years ago tularemia, commonly known as rabbit fever, was something of a rarity in Indiana. It seems, however, that the present hunting season has brought the subject prominently before Hoosier residents, in that there has been a marked increase in the disease in certain sections of our state. Tularemia rarely causes death but it commonly puts its victim on the invalid list for a period of three to six months. Again, tularemia is often overlooked, and the illness is attributed to something else. Man-to-man communication is so rare as to be negligible; the infection is acquired through handling infected rabbits. Contrary to the opinion held by many laymen, the disease is not contracted from the eating of the infected animal, for thorough cooking effectually destroys the bacterium. Our Bureau of Publicity annually brings to the attention of hunters the fact that Hoosier bunnies are often found to be infected and suggests measures to avoid infection.

At the dinner conference of state journal editors, last November, one topic under general discussion was, "Shall the Editor Assume a Position of Leadership in the Profession of His State?" A year previously that very question was discussed in a paper presented before the same group, and we took the position that an editor should in no wise assume any such unwarranted and unwanted position, and that it is the duty of the editor to *reflect* and not to attempt to *create* medical opinion in his state. Since the November meeting several editors have commented on the subject, and all seem to agree that the editor's job is to edit his magazine and stop right there. Holman Taylor, of Texas, quaintly says, "Hence, I am usually in a position to establish and maintain a leadership in the *Journal* which is based upon the views of those actually in authority. When I cannot do this, I am inclined to feel that nothing should be done about it."

Earl Whedon, dynamic secretary of the Wyoming State Medical Society, found a little note that seems to have escaped our attention, a note that evidently came directly from "B. J." himself. This man Palmer on several occasions has delivered himself of opinions of this sort, which leads us to believe that he is quite in earnest in the matter. We use this note, taken from *Colorado Medicine* for September, 1936:

> Chiropractic is doomed. You have drifted so far from the basic principle of chiropractic that you have lost your identity and brought the basic science bill on your heads. Twenty-eight chiropractic schools have been closed . . . you cannot defeat the ends of science. The basic science bills are the buckshot which we deserve for trespassing. When chiropractors preach and practice and try to become physicians, then it is justifiable for the medical men to educate the chiropractor.—*Palmer.*

Business Week for November 28th comments on further efforts to be made to bring about changes in the present Federal Food and Drug Act, outlining the various similar efforts made since 1933 when the Tugwell bill was first proposed. Senator Royal W. Copeland, of New York, long-time advocate of drastic changes in this law, still is active in the matter. It now seems that rather than attempt an entirely new law, efforts will be directed toward several amendments. Patent medicine manufacturers, as well as those engaged in putting out certain of the proprietaries, were successful in staving off congressional action for the past three years; it remains to be seen just what forces they may be able to muster against the proposed amendments. We do not know to which department the subject belongs, but we do hope the Federal Radio Commission will do something to control in some measure the extravagant claims set forth for various nostrums, via the ether waves. "Patents" long ago supposed dead have been revived, and products of forty or more years ago are again credited with being the most potent of cures.

When you write your check for your local county medical society dues, write an additional check in the amount of seven dollars, and send it to 535 North Dearborn Street, Chicago, in payment of Fellowship dues in the greatest medical organization extant, the American Medical Association. Thus you will indicate that you are aware of the prodigious amount of work the American Medical Association has done in combating the trend toward socialized medicine, and you will help to support that same work. Too many doctors know little of what transpires at the Chicago headquarters; too many of us have made no personal contacts with that grand bunch of fellows who guide the destinies of American medicine. Those fellows like company; they drop whatever work they have in hand when you come in and see to it that you are given the opportunity to inspect the entire premises and to see just what is going on in that new and beautiful building which is attracting so much attention from Chicago citizens. Better run in the next time you are in Chicago, and you will feel more at home, in the sense of personal ownership, if you will make application for fellowship before you go, though it will not make you any more welcome.

Resettlement Administration and Community Health Cooperatives. Within the past sixty days, attempts have been made to establish health cooperatives in several Indiana communities similar to the cooperatives established in North Dakota. (For details in regard to the North Dakota Plan, see the American Medical Association Bulletin, Volume 31, No. 7, October, 1936.) Numerous conferences have been held with the Resettlement Administration state officials who maintain that they are not fostering this movement. R. C. Williams, M.D., national medical director of the Resettlement Administration, states that the RA is anxious to work in cooperation with the medical profession of the state. Right now your officers desire information as to any attempts that may be made to establish such health cooperatives in Indiana. If you are approached, before any action is taken either by your county medical society or by an individual physician in regard to this matter, we suggest that you get in touch immediately with the headquarters office of the Indiana State Medical Association, 1021 Hume Mansur Building, Indianapolis.

The "come-on" boys (with a fee of ten dollars per "come") continue to be active in their solicitations to prospective suckers for listing in their medical directories. This is not a new subject in these columns, but it will bear repeating, for the sucker list seems not to be exhausted. The present solicitation has just reached us in the form of a letter—a letter of perfect English composition and psychological salesmanship. So perfect is it mechanically that only an expert would recognize the fact that it is reproduced probably by thousands, and is not typewritten for the individual addressed. The letter makes it plain that the recipient has been duly adjudged competent to serve as an examiner for life insurance companies, but it is morally certain that no effort was made to ascertain that fact. The letter then proceeds to "build up" the prospect to the point of extracting from him the fee of ten dollars, and that particular paragraph is one sweet gem of English literature! Some of our readers already have received

a copy of this letter; others will receive it later in all probability. Save your ten dollars. Directors and managers of insurance companies are usually men of keen discernment; they do not select their medical examiners from commercial lists labeled as "medical directories."

Expert medical testimony was one of the most important of the many controversial questions discussed at the first Indiana medicolegal conference which was held in Indianapolis last month, and the most notable suggestion from the viewpoint of the profession in regard to this subject came from Dr. Frank Hutchins who discussed "qualifications of a psychiatric expert" during a round-table discussion on "Medicolegal Testimony as to Sanity." Dr. Hutchins suggested that each local county medical society or the State Medical Association appoint a special committee of physicians to whom a written statement of the physician's testimony would be submitted in order that the committee may pass upon the scientific accuracy of the testimony. If such committees were in existence, physicians would be doubly careful of the type of medical testimony they give in court, Dr. Hutchins maintains. Dr. Hutchins' paper and the manuscripts of other physicians and attorneys who spoke at this conference will appear from time to time in THE JOURNAL. The Indiana University School of Medicine is to be congratulated for the part it played in sponsoring this conference, and judging from this first one, such conferences probably will become annual affairs.

After an extended experience as secretary of one of our larger county medical societies, we feel qualified to talk on some of the problems of that much harassed official. Let him show that he is a sort of up-and-at-'em chap and he soon acquires the title of the "boss" of the society. "I guess he is efficient, all right, but he is too ——— bossy; wants to run the whole thing," is a complaint often heard. If the program committee falls down, or if a speaker already engaged finds it impossible to keep the appointment, it becomes the duty of the secretary to supply a pinch hitter; if this chap makes a home run, or even a three bagger, the secretarial stock advances amazingly. But should the guest speaker fail to register, then the secretary becomes a dull, dead dud. Much secretarial distress is due to delay in payment of the annual dues, a little oversight on the part of too many members that causes a lot of unnecessary work for the already over-worked official. There are many things to be done when some chap comes along with his dues out of season. Entering the transaction in the local records, sending the check to headquarters, handling the official receipt when it gets back, all takes a lot of time. We never have had the experience of having all dues paid early in the year, but from what other more fortunate secretaries tell us, it must be one grand and glorious feeling. We'd like to know how it feels, sometime! Brother, pay your dues in January. It will make your secretary happy, and you'll sleep better.

The Bulletin of the American Medical Association has appeared for the last time as a separate publication of the American Medical Association. On January second it will be published for the first time as a part of the official publication, *The Journal of the American Medical Association*, and thereafter it will appear weekly in *The Journal* instead of eight times per year as it has in the past. Dr. Morris Fishbein will serve as supervising editor of this department of *The Journal*. Some eight pages will be devoted to discussions of the various economic questions confronting the profession, and due space will be given to the Woman's Auxiliary. Early numbers will carry stories concerning headquarters activities as well as historical data dealing with the early history of the American Medical Association. We recall that a little more than a year ago, at a conference of secretaries and editors, we recommended something similar to this present project, to the end that the A. M. A. membership might be brought into closer touch with 535 North Dearborn St., Chicago, and while that recommendation probably had nothing to do with the decision of the Board of Trustees of the A. M. A., we are indeed pleased that this step has been taken, for it will establish a contact long denied and one that we deem most vital to the interests of all concerned. Thus do we have another argument for the establishing of a Fellowship with the American Medical Association which will bring with it the regular receipt of *The Journal of the American Medical Association*, the best medical magazine in the world; Fellowship also establishes a contact with A. M. A. headquarters that will be "tops" in results. Send in that Fellowship application right now so you will miss none of these special features of *The Journal of the A. M. A.*

With the annual Secretaries' Conference in the immediate offing, a few words regarding our experiences in arranging programs for the annual meeting of the county medical society may be in order. We have run the gamut of things possible in the way of entertainment at this final party of the year, and finally we seem to have hit on a popular chord. We have had vaudeville entertain-

ment of the highest order, paying more than one hundred dollars for talent; we have tried the gals, those in negligee and negligible array, but all to no purpose, for while the members laugh at the antics of the vaudevillists, and they yelp when some damsel picks on some poor bald-headed fellow and makes a monkey of him, yet the next week they are "sour" on such carryings-on; too much let down in dignity for a dignified profession. This year we tried a new stunt—and it worked! We persuaded Morris Fishbein to drive out from Chicago and just talk. There was no specified subject, and we verily believe that Dr. Fishbein had no one thought in mind when he arose to face the largest attendance in the history of our society, but he talked as few men can talk, and it went over big. All this was preceded by a dinner of the order-it-yourself variety, a dinner that set every member back in his chair, ready for plenty of action. Following was a group of movies, amateur in style but virile, red-blooded pictures of a Lake-of-the-Woods fishing trip, and a hunting trip in the wilds of British Columbia. The pictures were commented upon by those who were in the respective parties, and they commanded the admiration of all present. While it is obviously impossible for Dr. Fishbein to attend annual meetings of many county medical societies, it is possible to arrange programs of a similar character, with talent right from your own neighborhood. As we have said, this meeting was "tops" in our society. More than 150 were in attendance.

The new York *Herald-Tribune* recently carried an editorial, commenting on some goings-on down in Washington, to the effect that the Social Security Board had authorized a study of health insurance on a nation-wide scale. It seems that this editorial followed a communication from Dr. Floyd S. Winslow, president of the New York State Medical Society, a letter published by the paper in question and one that subsequently received much attention in the medical profession. Of course, Dr. Winslow was very much against the idea of a Federal system of health insurance. The *Herald-Tribune* goes on to state that there is need for "a wider distribution of medical services than now exists." Again it says, "there is a big element in the population either needy, ignorant or reckless of health, with low earning power but a real pride, that gets much less medical attention than it should." We shall have to admit the truth of this, but at the same time we all know of instances in which the health of individuals was sorely neglected, back in the palmy, busy days of '29, when there was work and wage for all who cared to accept it. So many folks have complacently accepted the various relief programs as to be in a most receptive mood for any governmental plan that promises much for little. However, the fact remains that certain Utopian dreamers and schemers are sitting in various official Washington saddles, ready to go to any lengths to foist their idle schemes on the American public. It is high time that the medical profession get in on the ground floor on this thing and regulate whatever plans seem to strike the fancy of the next Congress. We hold that it is far better to help regulate than to be regulated.

The number of traffic accidents continues to increase in spite of present efforts of the law-enforcing agencies. The percentage of increase is so great as to become a national problem, and it appears that the remedy has not been found. In the City of Hammond in 1936 there is an enormous increase in accidents of all sorts with a corresponding increase in the number of fatalities. Each year shows a marked increase in the number of cars licensed by the various states, and the number of automobiles has become so great that highway commissions are hard pressed to widen old highways and build new ones in sufficient numbers to accommodate the traffic. While we will not attempt to solve the perplexing problem of motor car accidents, it does seem to us that much of the fault lies with the police departments and the courts. The police, it seems to us, do not make any effort to control minor violations; the courts are at fault in that they are too prone to condone an offense and place the offender on probation, whatever that may mean. We have been watching our neighbor city, Chicago, with a great deal of interest since the traffic court in that city has been sending violators to jail in addition to the stiff fines that are charged against them. It is apparent that this method is having a salutary effect, for the number of accidents is much smaller than in former years. We believe that our courts would do well to assess greater penalties, and without suspension of them. Most people object to going to jail, even for a day or two, and if our courts would put "thumbs down" in all cases where the offender has been driving while under the influence of liquor, it would be a great help. But just when one is *drunk* becomes a question. In Indianapolis a few days ago there was a conference on traffic accident control, and the question seems to have been a major one before that meeting. We shall have more to say on the subject when we have received a full report of that conference.

SECRETARIES' ANNUAL CONFERENCE

Tenth Floor, Ball Room, Columbia Club, Monument Circle, Indianapolis

SUNDAY, JANUARY 31, 1937

1:00 p. m. Call to order and opening remarks by A. M. Mitchell, M. D., Terre Haute, Chairman.

1:10 p. m. "Historical Background of Secretaries' Conference," by E. O. Harrold, M. D., Marion.

1:20 to 2:40 p. m. RESETTLEMENT ADMINISTRATION AND COOPERATIVES:

1:20 p. m. "The Henryville Situation," by H. W. Shaw, M. D., Henryville.

1:30 p. m. "The Medora Situation," by Neal Matlock, M. D., Medora.

1:40 p. m. "The Resettlement Administration Health Problem in Indiana. General Program," by M. E. Hays, Indianapolis Regional Cooperative Specialist, Resettlement Administration.

1:50 p. m. "Medical Problem," by R. C. Williams, M. D., Washington, D. C., National Medical Director, Resettlement Administration.

2:10 p. m. "Adequate Local Full-Time Public Health Service," by Verne K. Harvey, M.D., Director, Indiana Division of Public Health.

2:25 p. m. Discussion.

2:40 p. m. "Present Trends in County Medical Society Programs," J. B. Maple, M. D., Sullivan, Secretary, Sullivan County Medical Society. Dr. Maple will touch upon such subjects as intern membership in local societies, joint meetings with dentists and lawyers, and collection of historical data by county societies.



M. E. Hays



Dr. R. C. Williams



Dr. Charles G. Heyd



Dr. Verne Harvey

3:00 p. m. Discussion of "Joint Meetings with Professional Groups," by Albert Stump, Indianapolis, attorney for the Indiana State Medical Association.

3:10 p. m. Round table discussion of Local Medical Society Problems by the secretaries themselves. Such subjects as:

"Exchange Speakers,"
"Collection of County Medical Society Dues,"
"Joint County Medical Society Meetings,"
"Scientific Programs," and
"County Society Constitutions and By-Laws."

to be discussed.

4:20 p. m. "THE JOURNAL of the Indiana State Medical Association," by E. M. Shanklin, M. D., Hammond, editor.

4:30 p. m. "The Legislative Outlook," by Norman M. Beatty, M. D., Indianapolis, chairman of the Committee on Legislation and Public Policy of the Indiana State Medical Association.

4:40 p. m. "The County Medical Society and the Headquarters Office," by Thomas A. Hendricks, executive secretary, Indiana State Medical Association.

4:50 p. m. General questions.

5:05 p. m. Election of chairman for 1937.

5:45 p. m. Dinner, ballroom, tenth floor, Columbia Club.
Introduction of president-elect, Herman M. Baker, M. D., Evansville.
Principal speaker, Charles Gordon Heyd, M. D., New York, president, American Medical Association. Subject, "The Service of the American Medical Association to Society."

ALL MEMBERS OF THE INDIANA STATE MEDICAL ASSOCIATION ARE INVITED TO ATTEND. DINNER WILL BE FREE TO THE COUNTY MEDICAL SOCIETY PRESIDENTS, SECRETARIES AND LEGISLATIVE COMMITTEE CHAIRMEN. FOR OTHERS, THE CHARGE WILL BE $1.25 PER PLATE.

PRESIDENT'S PAGE

EVERY DOCTOR A COMMITTEEMAN IN 1937!

Congress in session, state legislature with us for the next sixty days, Resettlement Administration cooperative health insurance plans, maternal and child health, cancer, tuberculosis, pneumonia and syphilis programs, and social security problems are only some of the matters demanding the attention of organized medicine as we prepare for 1937. In order to face these problems, active committees have been appointed by the Indiana State Medical Association for this coming year and several of these committees already have held meetings and are functioning. But no matter how active these formal committees are, and no matter how intelligently they may function, no matter how well they organize their work, they will accomplish their ends only through the cooperation and full support of each and every one of the 2,900 physicians who make up the Indiana State Medical Association.

Hence, as your president, I am appointing you and each and every member of the Indiana State Medical Association as a committee of one to stand ready to act whenever called upon to render a service to organized medicine this coming year which may be most critical.

I salute you as the grand army of Hoosier physicians which is prepared for any battle that may come, and I stand ready to render any service I am able on behalf of the profession, morning, noon and night.

Edmund D Leary

THE NEW BUREAU OF LOCAL HEALTH ADMINISTRATION

By JOHN W. FERREE, M.D.

Chief of Bureau of Local Health Administration
Indiana Division of Public Health

The Bureau of Local Health Administration recently has been set up in the State Division of Public Health to carry on with the establishment and administration of full-time health departments throughout the State of Indiana under the provisions of the statute passed in 1935 making possible local full-time health departments. The law was sponsored by the State Division of Public Health and approved by the Indiana State Medical Association.



John W. Ferree

Bearing in mind the definition of public health, "The art and science of preventing disease, prolonging life and promoting physical and mental efficiency through organized community effort," where such effort is obviously the best means for obtaining these objectives, let us define a full-time health department. It is an official public health organization consisting of a medical director, a public health nurse, sanitary engineer or sanitarian, and an office clerk serving a defined area on a whole time basis. The basic activities of such a unit are: (a) keeping of vital statistics; (b) communicable disease control; (c) maternal and infant hygiene; (d) school hygiene; (e) environmental sanitation, and (f) public health education. It is to be noted that no form of medical relief is included in these activities and that they are such activities as are obviously and generally conceded to be of public health concern.

ADVANTAGES

The advantages of such an organization, briefly, are: (1) It makes possible a well-rounded health program; (2) It is able to give much greater effectiveness to such a program through a stability and continuity otherwise impossible; (3) It prevents overlapping and duplication of efforts; (4) Responsibility for local health conditions is fixed; (5) It is flexible, allowing each locality to cope with its own problems as it deems best, and (6) Through efficiency and coordination with other agencies in handling health problems, it provides a health service much better proportionately than the increase in cost would indicate. This increase in cost would be in a great part off-set by the betterment of school attendance, fewer days lost work, and by lessening the financial burden on the public for the care of the indigent sick by reason of the program's preventive and educational features.

Full-time health units are not a new thing. The first department was established in 1908. While growth was slow the first few years, there were 138 units in 1920, 316 in 1925, and 569 in 34 states in 1933. The only unit so far existing in Indiana is the Lake County Unit, which was started in January, 1934, and this almost entirely through local efforts. Indiana has been a laggard in this important type of public health organization because there was no permissive legislation until 1935. The neighboring states of Michigan, Ohio, and Kentucky had on December 1, 1933, respectively, 32.8%, 55% and 66.3% of their rural population with local health service under the direction of full-time health officers.

COUNTIES MAY COMBINE TO FORM DISTRICTS

While ideally a full-time unit should be established in each county, in reality such factors as population, geographical area, local needs and financial resources, must determine the make-up of a unit. Counties may combine to form health districts. It is not deemed advisable to establish a full-time service for a population of less than 50,000. The State and Federal governments are now in position to grant material financial aid to areas unable, for various reasons, to provide adequately for such units. As soon as possible, however, the units should become to a large extent self-supporting.

The State Division of Public Health desires, first of all, the close cooperation of the medical profession, and it would be a distinct advantage to all concerned if the initiative in organizing these units were to come from the medical societies.

The State Division of Public Health will be glad to receive inquiry as to further details of this program, and will, on request, send a representative to discuss the matter more fully with the local medical societies.

HIGH SCHOOL ATHLETICS

The relationship between the athletics program of the Indiana High School Athletic Association and the Indiana State Medical Association is not generally appreciated. When the High School Association made it mandatory that high school boys engaging in football, basketball, or track events, or in undertaking to practice for these contests, be examined and certified as to health and physical fitness before permission to so participate would be granted, it was a step which distinctly tended to encourage the program for regular physical examination.

The fact that many persons who are perfect specimens of physical fitness in their teens become physical wrecks in their thirties is a noteworthy argument in favor of regularly repeated physical examinations, since there is no doubt but that competent medical advice at the proper time will, in a large measure, prevent the ravages of insidious disease. It is quite often this type of disease which by its slow progress and from its undetected origin, often in the nose or throat or in infected teeth, leads to irreparable heart, kidney, or joint involvement.

A policy of the Indiana State Medical Association which would adequately recognize the value of this program and encourage its proper development would be highly desirable. By this means the individual and his family and friends become aware of the advantages of a careful physical checkup and as a result the profession benefits by getting an opportunity to treat these insidious disorders before serious harm has been done.

It would seem advisable also to help build up a better understanding among patients and their friends and a fair minded attitude toward these examinations which are requested for certification of athletes. Some parents give little thought to these examinations and are satisfied with a signature on the certificate. This is certainly wrong. Other parents resent deeply any lack of interest or any slip-shod effort at examination. Parents have reported that certificates have been signed for their children without examination. This has been a rare occurrence but it has caused criticism of the examining physician and of the entire profession. It seems definitely necessary that the doctor insist that he be given a satisfactory opportunity to make an adequate examination of these boys.

W. D. LITTLE, M.D., *Chairman*,

Committee on Study of
High School Athletics.

DIPHTHERIA DEATHS IN NOVEMBER, 1936

We are indeed gratified to report that there were only six deaths from diphtheria in the month of November, 1936, as compared with twenty-five for last year and sixteen in 1934, which was the lowest previous record. We now have a total of eighty-nine for the year, which leaves us with the hope that we may possibly get by this year with under one hundred deaths. Perhaps the lowest previous figure has been one hundred twenty.

Deaths for the month of November are one each from the following counties: Lake, Allen, Lawrence, Marion, Monroe, and Vanderburgh. This indicates that there are no big epidemics in progress. All of the children are young, two of them being seven years old and the others under school age. This is a further indication of the fact that it is the young children that need immunization.

Gradually the children are being better and better immunized and as a result we may confidently expect diphtheria to become less common.

The deaths for the month are shown by counties below:

	No. for Month Nov., 1936	*No. for Year 1936*
Allen	1	4
Bartholomew	0	1
Benton	0	1
Brown	0	3
Cass	0	1
Clark	0	1
Delaware	0	2
Dubois	0	1
Elkhart	0	2
Grant	0	1
Greene	0	2
Howard	0	8
Jennings	0	1
Knox	0	3
Lake	1	8
Lawrence	1	4
Madison	0	4
Marion	1	13
Martin	0	1
Monroe	1	3
Montgomery	0	4
Owen	0	1
Parke	0	2
Pike	0	1
Ripley	0	1
St. Joseph	0	3
Tippecanoe	0	4
Vanderburgh	1	4
Vigo	0	2
Warren	0	1
Washington	0	1
Wayne	0	1
Total	6	89

MEDICO-LEGAL DEPARTMENT

ALBERT STUMP, ATTORNEY FOR THE INDIANA STATE MEDICAL ASSOCIATION

THE DUTY OF THE TOWNSHIP TRUSTEE TO SUPPLY MEDICAL CARE AND ATTENTION FOR WPA WORKERS

The law designates the township as overseer of the poor and enjoins the performance of those duties in the following language:

"The township trustees of the several townships of this state shall be ex-officio the overseers of the poor within their respective townships, and shall perform all duties with reference to the poor of their respective townships that may be prescribed by law."

Burns 1936 Supplement, Sec. 52-144.

His duties as such overseer are further stated as follows:

"The overseer of the poor in each township shall have the oversight and care of all poor persons in his township so long as they remain a charge, and shall see that they are properly relieved and taken care of in the manner required by law. He shall, in cases of necessity, promptly provide medical and surgical attendance for all of the poor in his township who are not provided for in public institutions; and shall also see that such medicines and/or medical supplies and/or special diets and/or nursing as are prescribed by the physician or surgeon in attendance upon the poor are properly furnished."

Burns 1936 Supplement, Sec. 52-148.

And further:

"Whenever an overseer shall ascertain by investigation that any poor person or persons or family require assistance, he shall furnish to them such temporary aid as may be necessary for the relief of immediate and pressing suffering; before any further final or permanent relief in any case is given, the overseer shall consider whether distress can be relieved by other means than an expenditure of township funds."

Burns 1936 Supplement, Sec. 52-150.

After claim has been made upon the trustee as overseer, it becomes his duty to make an investigation and then, if possible, to furnish employment in event the person applying for relief is in good health and able to work. If employment is obtained and the person applying refuses to work, aid may be denied him,

"but these restrictions shall not be construed as preventing the overseer of the poor from giving aid to members of the family or dependents of such person refusing employment."

Burns 1936 Supplement, Sec. 52-152.

The duty of the overseer extends to anyone who may be within his township

"lying sick therein or in distress, without friends or money, so that he or she is likely to suffer."

Burns 1936 Supplement, Sec. 52-162.

If the overseer refuses to give aid the person applying may make an application to the County Commissioners, who must give the applicant a hearing and may, if the Commissioners deem it proper, direct the overseer to relieve the applicant.

Burns 1936 Supplement, Sec. 52-160.

If an emergency existed where application to County Commissioners and hearing could not be had and the trustee failed to furnish the relief required of him, he would be guilty of a failure to perform his official duty. It has been held in a number of cases that under such circumstances he is liable for damages to the poor person who may have sustained injuries or damages through such failure.

48 Corpus Juris 443, Sec. 26.

In view of the definite requirement that the necessities of the poor must be supplied, as established in the statutes, it is not sufficient that some member of the family be given employment on a WPA project, to excuse the overseer of the poor from extending any further aid. If the family of the WPA employe is large and the necessities with reference to medical care are heavy, the mere fact that he may be employed does not deprive him of the right to further assistance as provided in the statute. Any other circumstances which made it impossible for the WPA worker to obtain adequate medical care for himself or his family would likewise entitle him to the additional assistance.

The views here expressed are consistent with the opinion of the Attorney General dated January 28, 1936, in a letter to Mr. Albert G. Hahn, Administrator of the Deaconess Hospital, of Evansville. The opinion was written by the Assistant Attorney General and reads as follows:

"January 28, 1936.

"Mr. Albert G. Hahn, Administrator,
The Deaconess Hospital,
Evansville, Indiana.

Dear Sir:

Your letter of January 13, 1936, to the Attorney General has been referred to me for reply. I am informed by Mr. Marshall of the Governor's Commission on Unemployment Relief that when a member of an indigent family receiving aid from the township trustee is given work on a WPA project, his case is *closed*. I do not think, however, that that necessarily means that the township trustee is absolutely prohibited from providing hospitalization for any member of such family. Ordinarily that would be the case, but not necessarily so. In other words, such person would occupy exactly the same position as any other person who may have some means of support, but not sufficient to meet the emergency. The whole question is to be determined

not upon the basis of the person being employed on a WPA project, but upon the basis of whether his condition is such as that under Indiana's poor relief law hospitalization may be granted. See Acts of 1935, page 439, also page 434.

Yours very truly,

Joseph W. Hutchinson,
Assistant Attorney General."

While this opinion was with regard to hospitalization expenses, it can be accepted as applicable quite as fully to medical care and attention. In fact, the case is stronger for expenses of medical and surgical attendance than it would be for hospitalization, because the Act as above quoted specifically refers to medical and surgical attendance, but does not specifically mention hospitalization.

Clip the following schedule of tax-paying dates and keep it in a handy place or give it to your bookkeeper. It may save you some penalties later on.

DATES FOR TAX-PAYING IN INDIANA

Jan. 30—Gross Income Tax Annual Report—4th quarterly payment.

Feb. 1—Social Security Tax Annual Report—4th quarterly payment.

Mar. 15—Federal Income Tax Report—1st quarterly payment.

Apr. 15—Gross Income Tax Report—1st quarterly payment.

Apr. 30—Social Security Tax—1st quarterly payment.

May 3—State and County Tax payment.

Jun. 15—Federal Income Tax—2nd quarterly payment.

Jul. 15—Gross Income Tax Report—2nd quarterly payment.

Jul. 31—Federal Capital Stock Tax Payment.

Jul. 31—Social Security Tax—2nd quarterly payment.

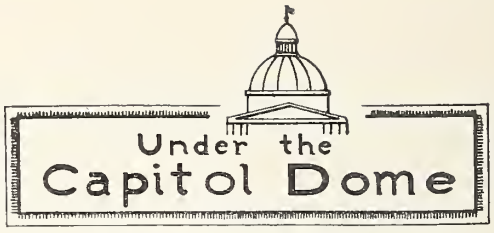
Sep. 15—Federal Income Tax—3rd quarterly payment.

Oct. 15—Gross Income Tax Report—3rd quarterly payment.

Nov. 1—State and County Tax Payment.

Nov. 1—Social Security Tax—3rd quarterly payment.

Dec. 15—Federal Income Tax—4th quarterly payment.



WPA NURSERY SCHOOLS

Thirty-three Works Progress Administration nursery schools are now operating in Indiana. Objectives of these schools are to develop the physical and mental well being of pre-school children from needy and underprivileged families, to assist parents in recognizing and meeting the nutritional, physical, educational and social needs of their children, and to restore unemployed teachers and allied workers to socially useful work.

FOOD FOR DEPENDENTS

The food supply for dependent families has been partly solved for this winter through canning projects of the Works Progress Administration during the canning season. Storage crops, principally potatoes, turnips and navy beans, also were grown in large quantities in mass gardens. Approximately 3,000,000 quarts of vegetables and fruits have been canned this year by WPA employees and relief families. This figure includes canning done in homes and in community canning centers. Garden and canning projects were sponsored by township trustees throughout the state to provide fresh vegetables during the summer and food for winter distribution.

A new educational film, "Behind the Shadows," is available for community showing through facilities of the bureau of health and physical education of the Indiana State Board of Health and the Indiana Tuberculosis Association. Showing of the film before local medical societies as a first step in a community case-finding program is suggested because such a program must have the support of local doctors if it is to be successful.

The Indiana Appellate court has upheld the decision of the Marion County Superior court which refused to require the State Board of Medical Registration and Examination to issue a license for practice of naturopathy to Harold A. Davis. Davis, according to a recital of the evidence by the Appellate court, sought his license when he was only 15 years old and had attended the "College of Drugless Physicians," formerly operated in Indianapolis by Dr. Briggs.

The practice in many localities of dentists giving general anesthetics for physicians and surgeons for various kinds of operations is not permissible

under the laws of Indiana, according to an opinion written by Philip Lutz, Jr., attorney general, for J. B. Carr, president of the state board of dental examiners.

The law limits their authority to administer general or local anesthetics to "dental anesthetics," the opinion held.

In writing the opinion, the attorney general called attention to an opinion issued Aug. 2, 1934, relative to the right of nurses to administer anesthetics, the opinion having held that such acts on the part of nurses were not permissible.

Several Indiana state health department officials attended the four-day conference of the American Public Health Association which was held in New Orleans, October twentieth to twenty-third. Those attending from the department were Dr. Verne K. Harvey, director of the public health division; Dr. Howard B. Mettel, chief of the maternal and child health bureau; B. A. Poole, assistant director of the health division; Dr. C. G. Culbertson, director of the bacteriological laboratory, and Miss Eva MacDougal, chief of the public health nursing division.

VENEREAL DISEASE IN WOMEN PRISONERS

Dr. Fernande H. Luck, physician at the Indiana Woman's Prison, reported that twenty-six per cent of the women admitted during the last fiscal year were affected with gonorrhea and 24.6 per cent with syphilis. A total of 266 new prisoners were received during the year.

The prison's statistical report revealed that a very large number of women had been convicted of crimes in some way involving sex. These included: adultery, 9; assault and battery with intent to commit rape, 1; frequenting house of ill fame, 1; fornication, 5; incest, 1; keeping house of ill fame, 4; public indecency, 7; prostitution, 1, and sodomy, 1. In addition 13 were sentenced for contributing and encouraging delinquency and 6 for loitering and vagrancy, which might have had a sex significance.

The statistical report also revealed interesting facts relative to the social condition of those admitted during the year. Of the total of 266, there were 37 single women; 87 married; 74 separated; 34 divorced; 33 widowed, and 1 unknown.

The age group into which most of the new prisoners fell was between 20 and 25 years, this group comprising 60 women. Fifty-four were between the ages of 26 and 30, while 44 were between 31 and 35 years old. Forty women were between 36 and 40 years of age, 37 between 40 and 50, and 18 between 51 and 60. Three were over 60. Ten of the new prisoners were under 20 years old. The average age was 35 years, 5 months.

DEATHS

Elmer E. Kirk, M.D., of Newcastle, died November 13, 1936, aged seventy-four years. Dr. Kirk had practiced medicine in Henry county for forty-eight years. Dr. Kirk graduated from the Cincinnati College of Medicine and Surgery in 1888. He was a member of the Henry County Medical Society, the Indiana State Medical Association and the American Medical Association.

Herman S. Bowles, M.D., of Muncie, died December 2, 1926, aged fifty-eight years. Dr. Bowles was a graduate of the Medical College of Ohio, Cincinnati, in 1902.

William Thomas Shelburne, M.D., of Indianapolis, died November seventeenth, aged seventy-nine years. Dr. Shelburne graduated from the Medical College of Indiana, Indianapolis, in 1889.

Lynn Rogers, M.D., retired physician, author, and traveler, died December 2, 1936, at the home of his sister in Lafayette. Dr. Rogers was for many years medical director of the French Lick Springs hotel, and had served in the United States Army during the World War. Dr. Rogers was a practicing attorney before he studied medicine. He graduated from the University of Michigan Medical School at Ann Arbor in 1907. Survivors include his twin brother, Dr. Clarke Rogers, of Indianapolis.

E. J. Ver Wayne, M.D., of Evansville, died November twenty-second, aged sixty-two years. Dr. Ver Wayne was a graduate of the Starling Medical College, Columbus, Ohio, in 1897.

HOOSIER NOTES

Dr. H. B. Turner was given a surprise birthday party at his home in Bloomfield, December ninth.

Dr. and Mrs. Alan R. Chambers have moved to Fort Wayne where Dr. Chambers will practice.

Dr. H. H. Koons, of Richmond, has been made a member of the Richmond Board of Health to succeed the late Dr. E. E. Kirk.

The Woman's Auxiliary to the Floyd County Medical Society met in New Albany, December fourth, for a luncheon and business meeting.

Dr. Howard E. Hill was elected president of the Muncie Kiwanis Club at the December 7th meeting of that organization.

Dr. Porter J. Coultas, of Tell City, has been advanced to the rank of lieutenant-colonel in the medical reserve corps.

Dr. Marcus W. Lyon, Jr., of South Bend, was elected editor for the Indiana Academy of Science at the November meeting of the organization.

Miss Rowena Dickman and Dr. A. M. Hasewinkle, of Fort Wayne, were married October twenty-fifth; they have located in Markle where Dr. Hasewinkle will practice.

Dr. E. R. Wilson, coroner of Marion County, has appointed three deputy coroners as follows: Dr. Frank W. Teague, Dr. Frank B. Ramsey, and Dr. Paul C. Furgason.

Dr. Robert W. Gehres, of Shelbyville, gave a biographical sketch of John Hunter before members of the Shelbyville Rotary Club, December tenth.

Dr. Joseph F. Casper has moved from Louisville, Kentucky, to Jasper, Indiana, where he will specialize in the practice of ophthalmology and otolaryngology.

Dr. Russell S. Henry, of Indianapolis, has been made a member of the board of governors of the Marion County Tuberculosis Hospital at Sunnyside.

Dr. W. L. Portteus, of Franklin, addressed a meeting of the Bargersville Parent-Teacher Association, November thirtieth. An audience of fifty heard Dr. Portteus' talk on cancer.

United States Civil Service announces examination for junior medical officer (psychiatric resident) at St. Elizabeth's Hospital, Department of the Interior, Washington, D. C.; applications must be on file January 4, 1936.

Dr. and Mrs. Frank E. Wiedemann, of Terre Haute, have gone to the Orient. They will spend some time in China, the Philippines, and India, and will return by way of Europe where Dr. Weidemann expects to visit some medical clinics before returning home.

Dr. Russell Hippensteel, of Indianapolis, addressed an audience of approximately 150 persons in a Richmond community hall, November nineteenth. The meeting was held under the auspices of the Richmond Circle, Child Conservation League of America.

The new annex to the Daviess County Hospital in Washington, Indiana, was dedicated November nineteenth. This is the second annex to the original hospital building. It contains a basement and two floors, and space is available in the second floor for future expansion. The addition was built with the aid of a government grant.

Announcement has been made of the marriage of Miss Allison Priest Arnold, Louisville, Kentucky, to Dr. Donald E. MacGregor, Indianapolis, Indiana. Following a wedding trip to Mexico City, they will be at home, 6 West 26th Street, Indianapolis, Indiana, after January fifteenth.

A recently organized group is the Indiana Orthopedic Club which has for its purpose the group study of trends in orthopedic and traumatic surgery. Officers of the group are Dr. Norman E. Jobes, Indianapolis, president; Dr. Charles F. Thompson, Indianapolis, vice-president, and Dr. Gordon W. Batman, Indianapolis, secretary-treasurer.

Officers of the recently organized Indiana Association of Clinical Psychologists are Dr. C. M. Loutitt, of Indiana University, president; Dr. Hazel Hansford Stevens, of the Family Welfare Society, vice-president; Dr. Harriett E. O'Shea, of Purdue University, secretary-treasurer; and Dr. Gladys D. Frith, of South Bend, and Dr. J. L. Rosenstein, of Butler University, executive committee members.

The Indianapolis city health board has approved plans for the addition of three floors to the proposed new two-story service uint at the Indianapolis City Hospital. The additional space is to be used for the hospitalization of colored persons as well as training and living quarters for more colored nurses and interns. The proposed addition will cost approximately $342,000, part of which will be requested from the WPA.

The next meeting of the Muncie Academy of Medicine will be held January twelfth, at the Hotel Roberts in Muncie. Dr. H. Close Hesseltine, of Chicago, will speak on "Diagnosis, Complications and Treatment of Lower Genital Tract Infections of the Obstetrical and Gynecological Patient." An invitation is extended to all interested members of the profession to attend the meeting.

The first international conference on fever therapy will be held at the College of Physicians and Surgeons, Columbia University, New York City, March 29, 30, and 31, 1937. Information concerning the conference and the program for it may be obtained from the secretary, Dr. William Bierman, 471 Park Ave., New York City. Registration fee for the conference will be $15.

Announcement of the selection of sixteen interns for the Indianapolis Methodist Hospital, who will enter the hospital July 1, 1937, for a year's service, includes the following names: Wallace Dyer, F. Eberle Thornton, Hanley Burton, Charles F. Seaman, Ernest W. Weiss, Miner W. Seymour, M. P. Cuthbert, M. L. Connerley, E. Blair Harter, Floyd Romberger, Jr., Harold L. Ericson, Edward F. Bloemker, Sydney Stevens, Kenneth H. Brown, Hugh A. Miller, and Oliver R. Wilson.

Thirty-three interns to begin work at the Indianapolis City Hospital July 1, 1937, have been selected as follows:

Joseph Bernstein, Ward Bloom, Donald J. Caseley, Walter L. Cohn, Fred Dick, James E. Engeler, Aza H. Fender, James B. Funkhouser, D. D. Gill, W. R. Griswold, William D. Hart, Marshall I. Hewitt, L. J. Hillis, William H. Hutto, T. W. Johnson, Hunter F. Kennedy, Melvin Lichtenberg, Jack L. Loudermilk, George A. McCoy, Leonard C. Miller, Walter F. Ramage, Harry G. Rotman, Gerald H. Somers, Richard C. Swan, E. Paul Tischer, James Topolgus, William F. Tranter, Robert L. Bender, Gilman P. Peterson, Carl L. Wheeler, W. C. Flowers, L. J. Buis, and Joseph H. Gardner.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories
- Sterile Ampoules Procaine Hydrochloride Crystals for Spinal Anesthesia, 50 mg.

Lederle Laboratories
- Tablets Digitalis Whole Leaf—Lederle, ¾ grain.
- Tablets Digitalis Whole Leaf—Lederle, 1½ grains.
- Tablets Digitalis Whole Leaf—Lederle, 3 grains.

McKesson & Robbins, Inc.
- McKesson's Halibut Liver Oil with Vitamin D Concentrate in Neutral Oil, Capsules, 3 minims.
- McKesson's Halibut Liver Oil Plain, 1 cc.
- McKesson's Halibut Liver Oil Plain, Capsules, 3 minims.

Sharp & Dohme, Inc.
- Scarlet Fever Streptococcus Toxin for Immunizing—Mulford.
- Scarlet Fever Streptococcus Toxin for the Dick Test—Mulford.

The following product has been accepted for inclusion in the List of Articles and Brands Accepted by the Council But Not Described in N.N.R. (New and Nonofficial Remedies, 1936, p. 471):

Belle Alkali Co.
- Dichlormethane Solvent.

Dr. William Moore, of New Albany, celebrated his eighty-fifth birthday anniversary December fifteenth. Fifty guests attended a dinner in his honor.

Dr. D. W. Bell, who has been located in Winslow for several months, has returned to his old home in Otwell to continue his practice.

INDIANA UNIVERSITY NEWS NOTES

The first medicolegal conference to be held in Indiana was conducted Friday, Dec. 4, at the Indiana university medical center on West Michigan street. The conference was under auspices of the Indiana university school of medicine, the Indiana State Police department, the Indiana university institute of criminal law and criminology and the Indiana Committee, a group of public spirited citizens interested in law enforcement and improvement of criminal law administration.

The conference had as its purpose the consideration of scientific methods of criminal investigation and coordination of medical and legal efforts in criminal procedure. Laboratory work of the university's departments of toxicology, bio-chemistry, pathology and psychiatry were demonstrated. Work of the new state police laboratory was shown. The question of the employment of medical examiners selected on the basis of their special qualifications for criminal investigative work was discussed.

A comprehensive exhibit on crime fighting was open to the public at the I. U. medical school building from 9 a. m. to 5 p. m. the day of the medicolegal conference. Among the pieces of crime-fighting equipment demonstrated were the comparison microscope used in fire arms identification, the Keeler Polygraph (lie detector), different types of firearms, chemical tests for intoxication, blood grouping tests, maps and charts showing the distribution and cost of crime. Specimens of criminal handwriting and inks, paper, and other supplies used in forgeries and kidnap were exhibited. The death mask of noted criminals, including John Dillinger and Singer were shown.

J. Edgar Hoover, head of the Federal Bureau of Investigation in Washington, sent to the conference the chief of the federal government's crime detection laboratory, E. P. Coffey. Mr. Coffey was one of the principal speakers at the dinner meeting in the evening. He spoke on "The Work of the Federal Laboratory."

Another well known criminal investigator who was on the program was Dr. C. W. Muehlberger, Chicago, coroner's toxicologist of Cook county and former assistant director of the Northwestern university scientific crime detection laboratory. Dr. Muehlberger has aided in the investigation and conviction in the famous Wynecoop case and in other equally noted cases.

At the afternoon meeting, Dr. Muehlberger spoke on "Reliability of Chemical Tests as Judged from Practical Experience." At the conference dinner he had for his subject "Some Newer Methods of Criminal Investigation."

Others on the conference program included Hugh McK. Landon, president of the Indiana committee; Dr. W. D. Gatch, I. U. school of medicine; Dr. Frank Forry, professor of pathology, Indiana university school of medicine; Dr. Clyde Culbertson, director, Central laboratory, Indiana university school of medicine; Dr. R. N. Harger, professor of biochemistry and toxicology, Indiana university school of medicine; Dr. H. K. Thornton, pathologist, Indianapolis City Hospital; Dr. Thurman B. Rice, chairman, department of bacteriology and pathology, Indiana university school of medicine; Prof. J. J. Robinson, director, Indiana university institute of criminal law and criminology; Dr. Kenneth G. Kohlsteadt, assistant superintendent, Indianapolis City Hospital; Dr. E. R. Wilson, coroner's physician and coroner-elect, Marion county; Dr. Robert L. Glass, department of mental and nervous diseases, Indiana university school of medicine; Dr. Frank F. Hutchins, chairman, department of mental and nervous diseases, Indiana university school of medicine; William H. Remy, attorney and formerly prosecutor of Marion county; Dr. Louis P. Harshman, superintendent, Fort Wayne State School for Feeble Minded, and Joseph J. Daniels, Indianapolis attorney.

Four sessions of the conference were held, with morning and afternoon sessions at the I. U. medical building and with the evening dinner program in the Riley room of the Claypool hotel. An open program was conducted from 10 to 12 a. m., the morning of Dec. 4 on the general subject of medical autopsy, with special regard to cases of death by violence and by unknown and disputed cases. A complimentary luncheon was held at the Riley hospital at noon for all members of the conference. The first afternoon program was devoted to chemical tests for intoxication. The general subject for the second afternoon session was medicolegal testimony as to sanity.

The conference was open to law enforcement officers, coroners, sheriffs, prosecutors, judges, state, city and industrial police, probation and parole officers, and members of law enforcement boards. Physicians, lawyers, laboratory workers, and scientists interested in problems of criminal investigation were invited to attend.

Erratum: In the article on Indiana Medicine in Retrospect, page 655 of the December 1936 issue, it is stated: "Dr. Whittlesey died August 16, 1924, three days after his brother, Dr. Charles Egbert Whittlesey." It should read: "Dr. Whittlesey died August 26, 1824, and his brother, Dr. Charles E. Whittlesey, died September 1, 1824."

CONSTITUTION AND BY-LAWS OF THE INDIANA STATE MEDICAL ASSOCIATION

The recodified articles of the Constitution of the Indiana State Medical Association will come up for final consideration and adoption at the eighty-eighth annual session of the State Association to be held at French Lick on October 4, 5 and 6, 1937. In 1934, a codification committee was appointed to re-draft both the Constitution and the By-Laws. This committee reported its proposed amendments to the Constitution and changes in the By-Laws at the 1935 session of the State Association at Gary. At that time the House of Delegates authorized the appointment of a new committee to consider this matter and to report its recommendations to the House of Delegates at the South Bend session which was held last October. In general, this new committee recommended the adoption of the amendments and changes as proposed by the original committee. However, this second committee did recommend some changes which differed from the suggestions of the original committee. The changes in the By-Laws recommended by the original committee and those of the 1936 committee were adopted, those of the first committee in 1935, and those of the second committee in 1936. They are, therefore, in effect as printed. The proposed amendments to the Constitution, which are required to lay over a year after their introduction, will come before the House for final action at the state session next fall. The paragraphs which are to be replaced in the Constitution are printed in parentheses while the newly proposed amended sections are printed in bold face type.

ARTICLE I.—NAME OF THE ASSOCIATION

The name and title of this organization shall be the Indiana State Medical Association.

ARTICLE II.—PURPOSES OF THE ASSOCIATION

The purposes of this Association shall be to federate and bring into one compact organization the entire medical profession of the State of Indiana, and to unite with similar societies of other states to form the American Medical Association; to extend medical knowledge and advance medical science; to elevate the standard of medical education and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to guard and foster the material interests of its members and to protect them against imposition; and to enlighten and direct public opinion in regard to the great problems of state medicine, and public health, so that the profession shall become more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life.

ARTICLE III.—COMPONENT SOCIETIES

Component societies shall consist of those county medical societies which hold charters from this Association.

ARTICLE IV.—COMPOSITION OF THE ASSOCIATION

Section 1.—This Association shall consist of Members, Delegates, Guests, and Associate and Honorary Members.

(**Sec. 2.**—*Members.*—The members of this Association shall be the members of the component county medical societies.)

Sec. 2.—*Members.*—**The members of this Association shall be the members of the component county medical societies. Membership in a county medical society on a basis not including membership in the Indiana State Medical Association is not recognized.**

Sec. 3.—*Delegates.*—Delegates shall be those members who are elected in accordance with this Constitution and By-Laws to represent their respective component societies in the House of Delegates of this Association.

Sec. 4.—*Associate Members.*—Members of the Indiana State Dental Association in good standing are, by virtue of their membership therein, made associate members of the Indiana State Medical Association.

(**Sec. 5.**—*Honorary Members.*—Honorary members shall consist of representative teachers and students of science allied to medicine and of physicians and surgeons of distinction not members of the Indiana State Medical Association, who may by vote of the House of Delegates be elected to honorary membership; and any physician of the State of Indiana who has attained the age of seventy-five years and has held membership in the Indiana State Medical Association for twenty years or more may be elected to honorary membership by majority vote of the House of Delegates, provided his name be proposed for such honorary membership by the county medical society of which such physician is a member and payment for THE JOURNAL of the Indiana State Medical Association by such county medical society which proposed such name for honorary membership.)

Sec. 5.—*Honorary Members.*—**Honorary members shall consist of representative teachers and students of science allied to medicine and of physicians and surgeons of distinction not members of the Indiana State Medical Association, who may by vote of the House of Delegates be elected to honorary membership; and any physician of the State of Indiana who has attained the age of seventy-five years and has held membership in the Indiana State Medical Association for twenty years or more may be elected to honorary membership by vote of the House of Delegates, provided his name be proposed for such honorary membership by the county medical society of which such physician is a member.**

Sec. 6.—*Guests.*—Any distinguished physician not a resident of this state who is a member of his own State Association may become a guest during any Annual Session on invitation of the officers of this Association, and shall be accorded the privilege of participating in all of the scientific work for that session.

ARTICLE V.—HOUSE OF DELEGATES

(The House of Delegates shall be the legislative and business body of the Association and shall consist of (1) Delegates elected by the component county societies; (2) the Councilors; (3) the ex-Presidents of the Indiana State Medical Association, and (4) *ex officio* the President, the President-elect, the Executive Secretary, and the Treasurer of this Association, without power to vote, except in case of a tie vote, when the President shall cast the deciding vote.)

The House of Delegates shall be the legislative and business body of the Association and shall consist of (1) Delegates elected by the component county societies; (2) the Councilors; (3) the ex-Presidents of the Indiana State Medical Association; and (4) *ex officio* the President, the President-elect, the Executive Secretary, the Treasurer of this Association, and the delegates to the American Medical Association, all without power to vote, except in case of a tie vote, when the President shall cast the deciding vote.

ARTICLE VI.—COUNCIL

(The Council shall consist of (1) the Councilors, and (2) *ex officio* the President, President-elect, Executive Secretary, and Treasurer. Besides its duties mentioned in the By-Laws, it shall constitute the Board of Trustees of this organization, having full charge and control of all the property of the Association. It shall have full authority and power of the House of Delegates between sessions of the House of Delegates and at all times shall be the finance committee of the Association. Five Councilors shall constitute a quorum.)

The Council shall consist of (1) the Councilors, and (2) *ex officio* the President, President-elect, Executive Secretary, and Treasurer. Besides its duties mentioned in the By-Laws, it shall constitute the Board of Trustees of this organization, having full charge and control of all the property of the Association. It shall have full authority and power of the House of Delegates between sessions of the House of Delegates, except that it shall not make changes in the laws governing the Association nor exercise legislative functions, except as stated in the By-Laws, and at all times shall be the finance committee of the Association. Five Councilors shall constitute a quorum.

ARTICLE VII.—SECTIONS AND DISTRICT SOCIETIES

The House of Delegates may provide for a division of the scientific work of the Association into appropriate sections and for the organization of such Councilor District Societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies.

ARTICLE VIII.—SESSIONS AND MEETINGS

Section 1.—The Association shall hold an Annual Session during which there shall be held daily general meetings and such section meetings as may be provided for, all of which shall be open to all registered members and guests.

Sec. 2.—The time and place for holding each Annual Session shall be fixed by the House of Delegates at the preceding Annual Session.

Sec. 3.—Special sessions of either the Association or the House of Delegates shall be called by the President on petition of twenty delegates or fifty members.

ARTICLE IX.—OFFICERS

(**Section 1.**—The officers of this Association shall be a President, a President-Elect, an Executive Secretary, a Treasurer, and thirteen Councilors.)

Section 1.—The officers of this Association shall be a President, a President-elect, an Executive Secretary, a Treasurer, and thirteen Councilors, each of whom shall be a member, except the Executive Secretary, who need not necessarily be either a physician or a member.

Sec. 2.—The officers, except the Councilors and the Executive Secretary, whose election has been provided for hereinafter, shall be elected annually. The terms of elected Councilors shall be for three years and approximately one-third of the number shall be elected annually. All of these officers shall serve until their successors are elected and installed.

Sec. 3.—The officers of this Association shall be elected by the House of Delegates on the morning of the last day of the Annual Session, but no delegate shall be eligible to any office named in the preceding section, except that of Councilor, and no person shall be elected to any such office who is not in attendance on that Annual Session and who has not been a member of the Association for the preceding two years.

Sec. 4.—The Councilors shall be elected by the respective district societies, providing that if any district shall exist without a society, or if the district society fails to meet and elect its Councilor and notify the House of Delegates before or at the time of the Annual Session, the Councilor for such a district shall be elected by the House of Delegates. Provided further, That if a Councilor district society fails to meet and elect its Councilor, the Councilor for that district shall be elected by the House of Delegates.

ARTICLE X.—RECIPROCITY OF MEMBERSHIP WITH OTHER STATE SOCIETIES

In order to broaden professional fellowship this Association is ready to arrange with other State Medical Associations for an interchange of certificates of membership so that members moving from one state to another may avoid the formality of re-election.

ARTICLE XI.—FUNDS AND EXPENSES

Funds shall be raised by an equal per capita assessment on each component society. The amount of the assessment shall be fixed by the House of Delegates. Funds also may be raised by voluntary contributions, from the Association's publications, and in any other manner approved by the House of Delegates. Funds may be appropriated by the House of Delegates to defray the expenses of the

Association, for publication, and for such other purposes as will promote the welfare of the profession. All motions and resolutions appropriating funds must be referred to the Council for approval before final action is taken thereon.

ARTICLE XII.—REFERENDUM

Section 1.—A General Meeting of the Association may, by a two-thirds vote of the members present, order a general referendum on any question pending before the House of Delegates, and when so ordered the House of Delegates shall submit such question to the members of the Association, who may vote by mail or in person, and if the members voting shall comprise a majority of all the members of the Association, a majority of such vote shall determine the question and be binding on the House of Delegates.

Sec. 2.—The House of Delegates may, by a two-thirds vote of its own members, submit any question before it to a general referendum, as provided in the preceding section, and the result shall be binding on the House of Delegates.

ARTICLE XIII.—THE SEAL

The Association shall have a common Seal, with power to break, change or renew the same at pleasure.

ARTICLE XIV.—AMENDMENTS

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates present at any Annual Session, provided that such amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been published twice during the year in THE JOURNAL of this Association.

BY-LAWS

CHAPTER I.—MEMBERSHIP

Section 1.—Any physician who is a member in good standing of a component county society and who has paid to this Association his annual dues is a member in good standing of the Indiana State Medical Association.

Sec. 2.—No person who is under sentence of suspension or expulsion from a component society, or whose name has been dropped from its roll of members, shall be entitled to any of the rights or benefits of this Association, nor shall he be permitted to take part in any of its proceedings until he has been relieved of such disability.

Sec. 3.—Each member in attendance at the Annual Session shall register by indicating the component society of which he is a member. When his right to membership has been verified, by reference to the roster of his society, he shall receive a badge, which shall be evidence of his right to all the privileges of membership at that session. No member shall take part in any of the proceedings of an Annual Session until he has complied with the provisions of this section.

CHAPTER II.—GENERAL MEETINGS

Section 1.—All registered members may attend and participate in the proceedings and discussions of the General Meetings and the meetings of the sections. The General Meetings shall be presided over by the President or by the President-elect, and before them shall be delivered the address of the President and the orations, unless the Committee on Scientific Work, with the sanction and approval of the officers, shall arrange otherwise.

Sec. 2.—The General or Section Meetings may recommend to the House of Delegates the appointment of committees or commissions for scientific investigation of special interest and importance to the profession and public.

Sec. 3.—No address or paper before the Association, except those of the President and orators, shall occupy more than twenty minutes in its delivery; and no member shall speak longer than five minutes nor more than once on any subject, except by unanimous consent, except the first discussant, who shall be allowed ten minutes.

Sec. 4.—All papers read before the Association or any of the sections shall become its property and shall not be published in any but the official publications of this Association, except by consent of the officers and the Editorial Board of this Association. Each paper shall be deposited with the Executive Secretary when read.

Sec. 5.—The Indiana State Medical Association shall appropriate from its funds the sum of Five Hundred Dollars ($500) annually for the entertainment of its members and guests, this money to be expended at the direction of the President, Executive Secretary, and Treasurer of the State Association, and the Chairman of the Entertainment Committee, who is appointed annually by the President of the Association. All money in excess of that expended for actual expenses incurred at that session is to revert each year to the treasury of the State Association.

CHAPTER III.—SECTIONS

Section 1.—During the Annual Session the Association may meet in the following sections:

a. Surgical.
b. Medical.
c. Eye, Ear, Nose, and Throat.
d. Anesthesia.
e. Any other sections that hereafter may be provided for by the House of Delegates.

Sec. 2.—The officers of each section shall be a Chairman, a Vice-Chairman, and a Secretary, and they shall preside over the meetings of the sections and shall be responsible to the Committee on Scientific Work for the section speakers and papers.

Sec. 3.—The election of officers of the sections shall be the first order of business of the last meeting of the sections during the Annual Session.

Sec. 4.—No section meeting shall be allowed to conflict with a general meeting.

CHAPTER IV.—HOUSE OF DELEGATES

Section 1.—The House of Delegates shall meet the day before or during that fixed as the first day of the scientific meeting of the Annual Session. It may adjourn from time to time as may be necessary to complete its business, provided that its

hours shall conflict as little as possible with the General or Section Meetings. It shall meet on the morning of the last day of the Annual Session for the election of officers for the ensuing year, and for the completion of any business previously introduced. The order of business shall be arranged as a separate section of the program.

Sec. 2.—Each component county society shall be entitled to send to the House of Delegates each year one delegate for every fifty members and one for each major fraction thereof; but, irrespective of the number of members, each component society which has made its annual report and paid its assessments, as provided in this Constitution and By-Laws, shall be entitled to one delegate. The names of duly elected delegates and alternates from each component society shall be sent to the Executive Secretary of this Association annually on or before June first prior to the Annual Session at which such delegates are to serve. No one shall be entitled to a seat in the House of Delegates unless his credentials as a delegate or alternate, properly signed by the Secretary and President of his county society, be presented to the Committee on Credentials at the time of the Annual Session. If any component county medical society is without representation at the end of the roll call, then the members registered in attendance from that county may select from their number a delegate to serve until the regular delegate or alternate appears, and any delegate so named must receive a vote of affirmation from the House of Delegates before he can be seated.

Sec. 3.—Twenty delegates shall constitute a quorum.

Sec. 4.—It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.

Sec. 5.—It shall divide the state into Councilor Districts, specifying what counties each district shall include, and when the best interests of the Association and profession will be promoted thereby, organize in each district a medical society, and all members of component county societies, and no others, shall be members of such district societies.

Sec. 6.—It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates. Such committees shall report to the House of Delegates, and the members of such committees may be present and participate in the debate on their reports.

Sec. 7.—It shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective.

Sec. 8.—Funds may be appropriated by the House of Delegates, subject to approval by the Council, for such purposes as will promote the welfare of the Association and the profession.

Sec. 9.—At the first meeting the President shall appoint from among the members of the House of Delegates, Reference Committees, as hereinafter provided for, and any other committees considered by him necessary to expedite the business of the Association.

CHAPTER V.—ELECTION OF OFFICERS

Section 1.—The election of officers shall be the first order of business of the House of Delegates after the reading of the minutes on the morning of the last day of the Annual Session.

Sec. 2.—All elections shall be by ballot, and a majority of the votes cast shall be necessary to elect. In case no nominee receives a majority on the first ballot, the nominee receiving the lowest number of votes shall be dropped and a new ballot taken.

Sec. 3.—Any person known to have solicited votes for or sought any office within the gift of this Association shall be ineligible for any office for two years.

Sec. 4.—The term of office, unless otherwise specified, shall be for the fiscal year following the date of election.

CHAPTER VI.—DUTIES OF OFFICERS

Section 1.—The President shall preside at all General Meetings of the Association and of the House of Delegates; shall appoint all committees not otherwise provided for; he shall deliver an annual address at such time as may be arranged by the Scientific or Program Committee, and perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the state during his term of office, and as far as practicable, shall visit by appointment the various sections of the state and assist the Councilors in building up the county societies and in making their work more practical and useful.

Sec. 2.—The President-elect's term of office shall be for one year, at the completion of which he succeeds to the presidency. While President-elect he shall assist the President in the discharge of his duties. In the event of the President's death, resignation or removal, the President-elect shall succeed him in office.

Sec. 3.—The Treasurer shall give bond at the expense of the Association in such an amount as shall be required by the Council. He shall demand and receive all funds due the Association, except accounts due THE JOURNAL in the conduct of its business, together with bequests and donations. He shall pay money out of the treasury only on a written order by the President, countersigned by the Chairman of the Council. He shall present to the House of Delegates annually a report of the receipts and expenditures, and the state of the funds in his hands, and shall subject his accounts to such examination as the House of Delegates may order.

Sec. 4.—The Executive Secretary shall attend the General Meetings of the Association, and the meetings of the House of Delegates and the Council, and shall keep minutes of their respective pro-

ceedings in separate record books. He shall be Secretary of all committees of the Association, assist them in the performance of their duties and keep a record of their proceedings. He shall, under instructions from the Bureau or Committee on Publicity, issue and send to lay publications such educational articles as may be prepared and authorized for general publication, and secure and assign medical speakers to address (on invitation) lay organizations on subjects pertaining to individual or community health. He also shall, whenever requested, assist any of the component societies of the Association in securing speakers or otherwise preparing a program for special meetings; he shall at all times hold himself in readiness to advise and aid, so far as practicable, any and all officers or committees of the Association in the performance of their duties or to carry out any of the purposes or policies of the Association. He shall be custodian of all record books and papers belonging to the Association, except such as properly belong to the Treasurer, and shall keep account of and promptly turn over to the Treasurer all funds of the Association which come into his hands. He shall be bonded at the expense of the Association in such an amount as shall be required by the Council. He shall provide for the registration of the members and delegates at the Annual Session. He shall, with the cooperation of the secretaries of the component societies, keep a card-index register of all the legal practitioners of the state by counties, noting on each his status in relation to his county society, and, on request, shall transmit a copy of this list to the American Medical Association. He shall report promptly memberships and proceedings or reports of the House of Delegates, the Council, or any committees of the Association to the Editor of THE JOURNAL for publication. He shall aid the Councilors in the organization and improvement of the county societies and in the extension of the power and usefulness of this Association. He shall conduct the official correspondence, notifying members of meetings, officers of their election, and committees of their appointment and duties. He shall employ such assistants as may be ordered by the Council, and shall make an annual report to the House of Delegates. He shall supply each component society with the necessary blanks for making their annual reports; shall keep an account with the component societies, charging against each society its assessments, collect the same, and at once turn it over to the Treasurer. Acting with the Committee on Scientific Work and the Editor of THE JOURNAL, he shall prepare and issue all programs. The amount of his salary shall be fixed by the Executive Committee on approval of the Council.

Sec. 5.—The necessary expenses of the above officers incurred in the line of duty herein imposed may be allowed by the Council, but excepting the Executive Secretary, this shall not include the expense of attending the Annual Session.

CHAPTER VII.—COUNCIL

Section 1.—The Council shall meet as follows: 1. Annually, in December or January. 2. On the day preceding the first day for the scientific meetings of the Annual Session of the Association. 3. On the last day of the Annual Session of the Association after the adjournment of the House of Delegates. 4. At such other times as necessity may require, subject to the call of the Chairman, or on petition of three Councilors. It shall hold no meeting that will conflict with any meeting of the House of Delegates. It shall elect a Chairman; and a Clerk, who, in the absence of the Executive Secretary of the Association, shall keep a record of its proceedings. It shall, through its Chairman, make an annual report to the House of Delegates. Five Councilors shall constitute a quorum for the transaction of business.

Sec. 2.—Each Councilor shall be organizer, peacemaker, and censor for his district. He shall visit the counties in his district at least once a year for the purpose of organizing component societies where none exist; for inquiring into the condition of the profession, and for improving and increasing the zeal of the county societies and their members. He shall make an annual report of his work and of the condition of the profession of each county in his district, the same to be published in the number of THE JOURNAL which is issued immediately preceding the Annual Session, and the report should be approved by the House of Delegates, with such recommendations as seem indicated. The necessary expenses incurred by such Councilor in the line of the duties herein imposed may be allowed by the Council on a properly itemized statement, but this shall not be construed to include his expense in attending the Annual Session of the Association.

Sec. 3.—The Council shall, through its officers and otherwise, give diligent attention to and foster the scientific work and spirit of the Association, and shall study and strive constantly to make each Annual Session a stepping stone to future ones of higher interest.

Sec. 4.—The Council shall, in connection with the House of Delegates, consider and advise as to the material interests of the profession and of the public in those important matters wherein it is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation and to diffuse popular information in relation thereto.

Sec. 5.—The Council shall make careful inquiry into the condition of the profession of each county in the state and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse among physicians of the same locality and shall continue these efforts

until every physician in every county of the state who can be made reputable has been brought under medical society influence.

Sec. 6.—The Council shall encourage postgraduate and research work, as well as home study, and shall endeavor to have the results utilized and intelligently discussed in the county societies.

Sec. 7.—The Council shall, upon application, provide and issue charters to county societies organized to conform to the spirit of this Constitution and By-Laws.

Sec. 8.—In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies to be designated by hyphenating the names of two or more counties so as to distinguish them from district and other classes of societies; and these societies, when organized and chartered, shall be entitled to all the privileges and representation provided herein for county societies, until such counties may be organized separately.

Sec. 9.—The Council shall be the Board of Censors of the Association. It shall consider all questions involving the rights and standings of members whether in relation to other members, to the component societies, or to this Association. All questions of an ethical nature brought before the House of Delegates or the General or Section Meetings shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members of component societies on which an appeal is taken from the decision of an individual Councilor, and its decision in all such matters shall be final.

Sec. 10.—The Council shall provide for and superintend all publications of the Association, and shall have authority to appoint an editor and such assistants as it deems necessary, and fix the amounts of their salaries. The proceedings of the Council for the year shall be reported to the House of Delegates at the Annual Session and be published in the number of THE JOURNAL which immediately precedes the Annual Session.

Sec. 11.—In the interim between the sessions of this Association the Council shall be the executive body of the Association with full power to fill vacancies or transact any business that emergencies or the welfare of the Association may require.

Sec. 12.—The Council shall employ an Executive Secretary, who need not be a physician nor a member of the Association.

(**Sec. 13.**—The Council shall elect a committee of five members of the Association, three of whom in consequence of their necessarily intimate relationship with the Association shall be President, President-elect, and the Chairman of the Council, which shall be known as the Executive Committee.)

Sec. 13.—The Council shall elect two members of the Association, who, with the President, the President-elect, and the Chairman of the Council, shall constitute and be known as the Executive Committee.

CHAPTER VIII.—STANDING COMMITTEES

Section 1.—The standing committees shall be as follows:

The Executive Committee.

A Committee on Arrangements.

A Committee on Scientific Work.

A Committee on Public Policy and Legislation.

A Committee on Publicity.

A Committee on Industrial and Civic Relationship.

A Committee on Medical Education and Hospitals.

A Committee on Budget.

A Committee on Public Relations.

Such committees, except the Executive Committee, which is elected by the Council, and the Committee on Budget, the membership of which is hereinafter provided for, shall be appointed by the President of the Association, and the President and Executive Secretary of the Association shall be *ex officio* members of all standing committees. The President also may appoint such other committees as may be necessary. No member of the Indiana State Medical Association shall serve as a member of two major committees in any one year.

Sec. 2.—*The Executive Committee,* consisting of five members as heretofore provided for, shall meet regularly once a month with the Executive Secretary to plan and execute such work as may be necessary for the welfare of the Association and the conduct of the Executive Secretary's office. It shall constitute the Medical Defense Committee of the Association and shall have full authority governing all matters pertaining to the medical defense features of this Association, and shall be governed by the rules and regulations concerning such features as provided for in the By-Laws of this Constitution. It shall represent the Council during intervals between meetings of that body and shall report its doings to the Council.

Sec. 3.—*The Committee on Arrangements,* with the advice and assistance of the Executive Secretary, shall provide suitable accommodations for the meetings of the Association, including the House of Delegates, Council, and of their respective committees, the scientific and commercial exhibits, and in conjunction with the Executive Secretary shall have general charge of all the arrangements. Its Chairman shall report an outline of the arrangements to the Executive Secretary of the Association for publication in THE JOURNAL and in the official program, and shall make additional announcements during the session as occasion may require. The arrangements for and the character of any and all commercial exhibits must meet with the approval of the Executive Committee of the Association.

Sec. 4.—*The Committee on Scientific Work* shall consist of three members, one to serve one year, one to serve two years, and one to serve three years, thereafter one to be appointed each year for a period of three years; the senior member to be Chairman.

The President, the officers of the sections, and the Executive Secretary are to be *ex officio* members.

Liaison shall be maintained between the Committee on Scientific Work and the scientific exhibitors. Thirty days previous to each Annual Session it shall prepare and issue a program announcing the order in which papers, discussions, and other business shall be presented. Such program and all announcements concerning the Annual Session shall be published in the number of THE JOURNAL of the Association that is issued just prior to the Annual Session.

Sec. 5.—*The Committee on Public Policy and Legislation* shall consist of three members and the President and Executive Secretary of the Association. Under the direction of the House of Delegates it shall represent the Association in securing and enforcing legislation in the interest of public health, medical education, scientific medicine and the economic welfare of the medical profession. It shall keep in touch with professional and public opinion, shall endeavor to shape legislation so as to secure the best results for the whole people, and to protect the medical profession, and shall strive to organize professional influence so as to promote the general good of the community in local, state and national affairs and elections.

Sec. 6.—*The Committee on Publicity* shall consist of five members, two of which shall be the President and the Executive Secretary of the Association. It shall be responsible for the dissemination of information concerning individual and community health to the lay public through articles prepared for publication in lay publications, or for addresses or talks delivered before lay audiences under the authority of the Association, and shall in every way seek to give the lay public a better knowledge and understanding of the aims and objects of scientific medicine.

Sec. 7.—*The Committee on Industrial and Civic Relationship* shall consist of three members appointed by the President, each to serve for three years, one member to be appointed each year. The duties of the committee shall be: To study, gather facts and become intimately acquainted with all and every movement wherever and by whomsoever agitated, proposed, enacted or attempted to be enacted, that has as its secret or avowed object the providing of social, commercial or industrial medical insurance for the public, civic or commercial employers, or for the providing of medical or surgical care to a group or groups of individuals, singly or collectively, or which in any manner affects the economic and financial status of the members of this Association either individually or collectively; to represent this Association in efforts to secure greater cooperation and a mutual understanding between medical men and employers of labor or their insurance carriers concerning the rendering of professional services in industrial cases and the amount and character of compensation therefor; to devise and advise, whenever necessary, intelligent action on the part of this Association upon these questions; and to report annually, and in writing, its findings, recommendations and information to the House of Delegates. Should occasion arise in the interval between the stated meetings of the House of Delegates when prompt action becomes imperative, the commtitee is to present its findings to the Chairman of the Council and President, who are to proceed in such emergencies as empowered by this Constitution and By-Laws.

Sec. 8.—*The Committee on Medical Education and Hospitals* shall consist of three members appointed by the President, each to serve for three years, one member to be appointed each year. The duties of this committee shall be to cooperate with the authorities of the Indiana University School of Medicine in efforts to improve the educational standards of the state as they pertain to the practice of medicine; to act in conjunction with the members of the Council in providing postgraduate clinics or teaching for the various Councilor medical districts of the state; to select one of its own members as a delegate to the yearly Conference on Medical Education and Hospitals of the American Medical Association; and to cooperate with the corresponding Council of the American Medical Association.

Sec. 9.—*The Committee on Budget* shall consist of the officers, the retiring President and the chairman of the Council. The duty of this committee shall be to prepare a budget for the ensuing year, and all expenditures of the Association, except those otherwise provided for by the Constitution and By-Laws, shall be governed by the budget. No expense not provided for in the budget shall be incurred by any officer or committee. A committee or an officer may submit a request for funds to meet unusual expenses, which request may be granted by two-thirds vote of the Budget Committee.

Sec. 10.—*The Committee on Public Relations* shall have as its duty to act as liaison between the Indiana State Medical Association, the Indiana University School of Medicine, the Indiana Division of Public Health, and the public; to hear and investigate complaints; to gather facts, and so far as it may be in their province, to correct existing faults and incorrect information; to further cooperation; and to obtain proper and legitimate publicity through the Publicity Committee of all matters of public interest concerning the above.

CHAPTER IX.—REFERENCE COMMITTEES

Section 1.—Immediately after the organization of the House of Delegates at each Annual Session, the President shall appoint from the members of the House, reference committees to serve during the session at which they are appointed. Each committee shall consist of five members, the chairman to be specified by the President. To these committees shall be referred all reports, resolutions, meas-

ures and propositions presented to the House of Delegates, except such matters as properly come before the Council, and the recommendations of these committees shall be submitted to the next meeting of the House of Delegates for acceptance in the original or modified form or for rejection.

Sec. 2.—The following reference committees are hereby constituted:

(1) A Committee on Sections and Section Work to which shall be referred all matters relating to the sections or section work. The members of the Committee on Scientific Work shall be members *ex officio* of this committee.

(2) A Committee on Rules and Order of Business to which shall be referred all matters regarding rules governing the action, methods of procedure, and order of business of the House of Delegates.

(3) A Committee on Medical Education and Hospitals to which shall be referred all matters relating to medical education and medical colleges and hospitals. The members of the standing committee on Medical Education and Hospitals shall be *ex officio* members of this committee.

(4) A Committee on Public Policy and Legislation to which shall be referred all matters relating to state and national legislation, and memorials to the legislature, to the United States Congress, to the Governor of the state, or to the President of the United States. The members of the standing committee on Public Policy and Legislation shall be *ex officio* members of this committee.

(5) A Committee on Publicity to which shall be referred all matters relating to publicity. The members of the standing committee on Publicity shall be *ex officio* members of this committee.

(6) A Committee on Hygiene and Public Health to which shall be referred all matters relating to hygiene and public health.

(7) A Committee on Amendments to the Constitution and By-Laws to which shall be referred all proposed amendments to the Constitution and By-Laws.

(8) A Committee on Reports of Officers to which shall be referred the address of the President and the reports of the Executive Secretary, Treasurer, and the Council.

(9) A Committee on Credentials to which shall be referred all questions regarding registration and the credentials of delegates.

(10) A Committee on Miscellaneous Business to which shall be referred all business not otherwise disposed of.

CHAPTER X.—COUNTY SOCIETIES

Section 1.—All county societies now in affiliation with this Association or those which may hereafter be organized in this state, which have adopted principles of organization not in conflict with this Constitution and By-Laws, shall, on application, receive a charter from and become a component part of this Association. The acceptance or retention of this charter shall be regarded as a pledge on the part of the said component society to conduct itself in harmony with the letter and/or spirit of this Constitution and By-Laws and other rules and resolutions of this Association.

Sec. 2.—Charters shall be issued only upon approval of the Council and shall be signed by the President and Executive Secretary of this Association. The Council shall have authority to revoke the charter of any component society whose actions are in conflict with the letter and/or spirit of this Constitution and By-Laws.

Sec. 3.—Only one component medical society shall be chartered in any county. Where more than one county society exists, friendly overtures and concessions shall be made, with the aid of the Councilor for the district if necessary, and all of the members brought into one organization. In case of failure to unite, an appeal may be made to the Council, which shall decide what action shall be taken.

Sec. 4.—Each county society shall be judge of the qualifications of its own members, but, as such societies are the only portals to this Association and to the American Medical Association, every reputable and legally registered physician who does not practice or claim to practice, nor lend his support to, any exclusive system of medicine, shall be entitled to membership. Before a charter is issued to any county society, full and ample notice and opportunity shall be given to every physician in the county to become a member.

Sec. 5.—Any physician who may feel aggrieved by the action of the society of his county in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Council, and its decision shall be final.

Sec. 6.—In hearing appeals the Council may admit oral or written evidence as in its judgment will best and most fairly present the facts, but in case of every appeal, both as a board and as individual Councilors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

Sec. 7.—When a member in good standing in a component society moves to another county in this state, his name, on request, shall be transferred without cost to the roster of the county society into whose jurisdiction he moves.

Sec. 8.—A physician living on or near a county line may hold his membership in that county most convenient for him to attend, on permission of the society in whose jurisdiction he resides.

Sec. 9.—Each component society shall have general direction of the affairs of the profession in its county, and its influence shall be constantly exerted for bettering the scientific, moral and material condition of every physician in the county; and systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified and honorable physician in the county.

Sec. 10.—At the annual business meeting for election of other officers, in advance of the Annual Session of this Association, each county society shall elect delegates and alternates to represent it in the House of Delegates of this Association, and the secretary of the society shall send a list of such delegates and alternates to the Executive Secretary of this Association annually on or before June first.

Sec. 11.—The secretary of each component society shall keep a roster of all its members and of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this state, and such other information as may be deemed necessary. In keeping such roster the secretary shall note any changes in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

Sec. 12.—The fiscal year of the Association shall be from January 1 to December 31, and all assessments shall be for the fiscal year and *payable in advance*. The secretary of each component society shall forward the assessment for his society, together with the roster of officers and members and list of non-affiliated physicians of the county, to the Executive Secretary of this Association, on or before January 1 of each year, and he shall promptly report thereafter the names of any new members elected to membership in his society, and promptly forward to the Executive Secretary of this Association the assessment for such new members. The assessment shall be the same for all members and entitle the members to all benefits, including the publications of this Association, from the time of paying the assessment to the close of the fiscal year only.

Sec. 13.—Any county society which fails to pay its assessment or make the report required by February 1 of each year shall be held suspended, and none of its members or delegates shall be permitted to receive any of the publications of the Association or participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

Sec. 14.—Each county society shall be held responsible for the faithfulness in the performance of duty on the part of its secretary in making reports and remitting dues or assessments to the Association.

Sec. 15.—Each component society shall have its own Constitution and By-Laws, not in conflict with the Constitution and By-Laws either of this Association or of the American Medical Association, a copy of which shall be filed with the Executive Secretary of this Association; and furthermore, the Executive Secretary shall be notified at once of any changes or amendments that may be made from time to time.

CHAPTER XI.—MISCELLANEOUS

Section 1.—The deliberations of this Association shall be governed by parliamentary usage as contained in Roberts' Rules of Order, when not in conflict with this Constitution and By-Laws.

Sec. 2.—The Principles of Medical Ethics of the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

CHAPTER XII.—MEDICAL DEFENSE

Section 1.—Seventy-five cents out of the annual dues of each member of the Association shall be set aside as a special fund for medical defense.

Sec. 2.—The administration of medical defense of this Association shall be intrusted to the Executive Committee, which shall constitute the Committee on Defense of the Association.

Sec. 3.—This committee shall have full authority governing all matters pertaining to the Medical Defense features of this Association; with power to employ counsel, summon and employ expert witnesses and incur such other expenses as in the judgment of the committee may be necessary in the defense of members against whom suits may be brought; provided, always, that the total expenditure in any single suit shall not exceed 25 per cent of the fund available at the time suit is filed; and provided further that this Association shall not be liable for attorney's fees in such suits unless this committee shall have first agreed in each case with the physician sued and the attorneys representing him in regard to the terms of such employment, including the fees to be paid.

Sec. 4.—The Treasurer of the Indiana State Medical Association shall be custodian of the Defense Fund, separately kept, and shall give such additional bond as may be demanded by the Medical Defense Committee. He shall pay out money from this fund only on the signed order of the Chairman of the Executive Committee and countersigned by the President and the Chairman of the Council.

Sec. 5.—The Medical Defense Committee shall make an annual report to the House of Delegates of the cases in which it has been of service to members and furnish an account of the money received and expended, such report to be published in THE JOURNAL of the Indiana State Medical Association at the time and in the manner that reports of other committees of the Association are published. The financial report of the committee shall be submitted to and approved by the Council.

Sec. 6.—This Association shall not be liable for any damage awarded, but shall be liable only for such expenses for the legal defense of its members as may be incurred in accordance with the terms of these By-Laws.

Sec. 7.—The Association shall not undertake the defense of a member in a suit that may be brought to secure indemnity for services rendered prior to January 1, 1912, nor in any case in which the member who applies for medical defense by the

Association has failed to pay his annual dues for the year in which services were rendered which are the basis of the suit; and medical defense by the Association shall not be available in any suit based on services rendered during any period of delinquency in the payment of dues. (Dues are payable on January 1, and become delinquent on February 1 of each year.) The membership card of this Association, duly signed and dated by the Executive Secretary, shall be considered the only *bona fide* evidence of payment of dues or membership in this Association.

The Indiana State Medical Association shall in no case provide medical defense against any action for alleged malpractice against any physician unless such physician was a member of this Association in good standing at the time the services which are the basis of the suit were rendered.

Sec. 8.—A member desiring to avail himself of the services of the Committee on Medical Defense in connection with litigation brought or threatened must send to the Executive Secretary of the Association for an application blank. After completing the data concerning the case he shall submit to a local committee of his county medical society—to be composed of the President, Secretary and one other member in good standing who may be nominated by the defendant—a full statement of the question at issue, including the diagnosis and treatment of the case and the names of physicians, nurses and other persons having knowledge of the same, who may be summoned as witnesses.

Sec. 9.—The committee of the county medical society shall immediately, after an investigation of all the circumstances and facts, transmit its report, with recommendations, to the Committee on Medical Defense of this Association.

Sec. 10.—Accompanying such report from the county society, if favoring medical defense by the Association, there also must be furnished the written authority of the defendant granting to the Medical Defense Committee of this Association full power to act in his behalf, and an agreement that his case shall not be compromised or settled without the consent of a majority of the Committee on Medical Defense.

Sec. 11.—In the event that the county committee shall fail to recommend the case as one worthy of the recognition of this Association, a direct appeal may be made to the Committee on Medical Defense of this Association, whose decision shall be final.

Sec. 12.—Suits brought against the estate of a deceased member shall be defended as if that member were alive; provided that such member was in good standing in the Association at the time of his death and that services for which indemnity is asked were rendered while the deceased was a member in good standing.

Sec. 13.—Each member of the Committee on Medical Defense of this Association shall be entitled to an honorarium of $10 per diem for services actually rendered while at home, and $30 per diem with traveling expenses, if required to go out of town in the investigation of any case or attendance at court, and these same fees shall be allowed to expert witnesses under similar circumstances.

Sec. 14.—Medical defense shall not be available to members living outside of the State of Indiana at the time services were rendered for which indemnity is claimed.

Sec. 15.—The Committee on Medical Defense shall have power to adopt such other rules, not in conflict with the foregoing, as in their judgment may seem necessary.

Sec. 16.—Medical defense as provided for by this Association shall be available to members under the terms stated in these By-Laws only for the defense of civil action for alleged malpractice and shall not be available if such alleged malpractice occurred when the member was under the influence of any intoxicant or narcotic while rendering the service in question.

CHAPTER XIII.—DIVISION OF FEES

This Association does not countenance or tolerate fee-splitting, division of fees, or commission paying directly or indirectly, and any member found guilty shall be expelled from membership.

CHAPTER XIV.—AMENDMENTS

Section 1.—These By-Laws may be amended at any Annual Session by a majority vote of all the delegates present at that session, after the amendment has lain on the table for one day.

Sec. 2.—Upon the adoption of this Constitution and By-Laws, all previous Constitutions and By-Laws are hereby repealed.

DUES ARE PAYABLE ON JANUARY 1 AND BECOME DELINQUENT ON FEBRUARY 1. DON'T RISK DELINQUENCY.

SOCIETIES — INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION
THE EXECUTIVE COMMITTEE

December 6, 1936.

eting called to order at 10:45 a. m.

l call showed the following present: C. A. Nafe, M. D., man; H. H. Wheeler, M. D.; R. L. Sensenich, M. D.; E. Clark, M. D.; H. M. Baker, M. D.; O. O. Alexander, M. Albert Stump, attorney, and T. A. Hendricks, executive ary.

e monthly statements of Receipts and Expenditures and t of the Budget for the Association committees and JOURNAL for November were presented.

bership Report

mber of members December 5, 1936	2819
mber of members on December 5, 1935	2791
n over last year	28
mber of members December 31, 1935	2808

urer's Office

Upon the motion of Dr. Clark, seconded by Dr. Sen-n, the Committee moved that the annual audit of the be made by the George S. Olive Company, the same any that audited the books in 1935. The cost of the is not to exceed $100.00. This action was taken upon ondition that the selection of this company meets with pproval of the treasurer.

-Up on 1936 Session at South Bend

Letter received from Dr. J. V. Cassady, secretary of the oseph County Medical Society, giving a local financial nent and report upon the convention.

Letter received from Dr. Floyd T. Romberger in regard inting of the Constitution and By-Laws. The By-Laws opted and as enforced to date are to be printed in the ary issue of THE JOURNAL along with a copy of the nt articles and the proposed articles to the Constitu-These amended articles in the Constitution will come r final adoption at the next annual session.

Session at French Lick

Preliminary draft of commercial exhibit spaces brought attention of the Committee showing arrangements for aces as against 38 which were sold at South Bend.

The Committee approved the housing of the scientific t on the mezzanine floor in the main hotel building.

raduate Education

State committee to be named soon.

A letter was received from the American College of ons acknowledging the communication from the Execu-Committee stating that the Committee opposed holding ctional meeting of the College of Surgeons in Indianapo-s year.

aries' Conference, Sunday, January 31, 1937, Columbia Indianapolis

Committee reviewed and gave its final approval to the ed program for the coming conference. The Committee ed for a round table discussion of local county medical problems as a part of the program, feeling that this ore important than having the program composed of ny out-of-state speakers.

tive, Legal and Social Security Matters

Preliminary report upon legislative candidates.

Directories of the eightieth General Legislative Session distributed to the members of the Committee.

Suggestion by Dr. George Dillinger that congressmen ntacted immediately to ascertain their attitude toward ed medicine brought to the attention of the Committee.

embers of the Committee reported upon their own ssmen.

nterview with Governor Townsend to be arranged by gislative committee.

Story in New York *Herald Tribune* in regard to social edicine brought to the attention of the Committee.

Position of the Association in regard to gross income tax. The Executive Committee felt that the Association should take no active part in the discussion of this matter but should keep informed on any changes in the tax law that might affect the members of the profession.

7. Letter received from Dr. Davidson asking for revision of the 1927 amendment to the medical practice act which would make it invalid from now on for cultists to apply for a license under the guise that they were in practice in this state in 1927. This matter was referred to Albert Stump, attorney of the Association, who maintains that had the Board followed the provisions of the 1927 act no chiropractor or cultist need have been licensed under this act.

8. Information that the chiropractors will attempt to present to the legislature a separate board bill brought to the attention of the Executive Committee.

9. Social security forms filed by headquarters office upon recommendation of Mr. Stump.

Socialization of Medicine

1. Reports upon meetings with National Resettlement Administration reviewed by the Committee.

Group Hospitalization and Health Insurance

Several insurance companies writing group hospitalization policies have sprung up in Indiana within the last few months. Copies of the policies of the Indiana Travelers Assurance Company and literature of the American Income Insurance Company brought to the attention of the Committee.

Medical Economics

1. Preliminary program of the Northwest Conference which is to be held in Chicago in February brought to the attention of the Committee. The Committee authorized the executive secretary to attend this conference.

2. Request of Dr. M. A. Austin that the State Association buy 115 copies of Ochsner's book on Social Security approved by the Committee upon the motion of Dr. Wheeler, seconded by Dr. Sensenich. A copy of this book is to be given to each freshman medical student.

3. Opinion of Albert Stump in regard to the administration of anesthetics by registered nurses brought to the attention of the Committee. The Committee suggested that this be printed in THE JOURNAL if it already has not appeared in THE JOURNAL.

4. The 1,000 pamphlets on socialized medicine which are in the headquarters office are to be placed on a table at the secretaries' conference in case any of the secretaries desire them at that time.

Committee Appointments for 1937

Dr. Clark, the incoming president, presented his list of suggested appointments to the Committees. In addition to the regular and special committees that have been appointed in the past, a committee on syphilis control will be appointed in accordance with the recommendations of Surgeon-General Parran of the United States Public Health Service, and also a committee on old age dependency which was created upon authority of the House of Delegates at the 1936 meeting at South Bend..

The Executive Committee appointed the following committee on scientific exhibit:

C. G. Culbertson, Indianapolis, chairman.
A. S. Giordano, South Bend.
H. M. Banks, Indianapolis.

This committee was appointed upon the motion of Dr. Wheeler, seconded by Dr. Alexander.

A survey of committee appointments for the last ten years is being worked out under the direction of Alexander Cavins, statistician of the Association.

Organization of Starke County Medical Society

Dr. R. L. Sensenich made a report upon the organization of the Starke County Medical Society.

THE JOURNAL

1. The Committee approved the use of red on the cover page of the January issue of THE JOURNAL.

2. The Committee recommended that all premedic students receive THE JOURNAL for $1.00 per year.

3. The Committee recommended that the Council clarify the duties of the Editorial Board.

THE BUREAU OF PUBLICITY

November 10, 1936.

Present: William N. Wishard, M. D., chairman; E. V. Hahn, M. D., and T. A. Hendricks, executive secretary.

Release, "Thanksgiving Eating," approved for publication in Monday, November 23, papers.

Requests for Speakers:

November 10—Fayette-Franklin County Medical Society, Connersville, Ind. Speaker obtained to talk on "Recognition and Treatment of Congenital Deformities."

November 18—Parke-Vermillion Medical Society, Clinton, Ind.

December 2.—Sullivan County Medical Society, Sullivan, Ind. Speaker requested to talk on "The Commoner Skin Diseases."

The Bureau was informed that the Indiana State Library has copies of the former Indiana Medical Journal from Volume 1, 1882 through 1908. The chairman of the Bureau said that a medical journal had been published prior to 1882, the editor being Thaddeus M. Stephens, a nephew of the late Thaddeus M. Stephens of Pennsylvania, congressman during and following the Civil War. It was the same Doctor Thaddeus Stephens of Indiana who developed the Indiana State Board of Health and was its first secretary. He was succeeded by Doctor E. S. Elder.

November 18, 1936.

Present: William N. Wishard, M. D., chairman; F. M. Gastineau, M. D.; E. V. Hahn, M. D., and T. A. Hendricks, executive secretary.

Requests for Speakers:

December 3—Jasper-Newton County Medical Society, Rensselaer, Ind. Talk upon "Legal Medicine" by attorney of the Association.

The following report of a medical meeting was made to the Bureau:

October 28—Parke-Vermillion County Medical Society, Clinton. "Mental and Nervous Disorder," (10 present).

Report made by a member of the Bureau in regard to the correspondence from a life insurance company concerning an anti-pneumonia campaign. The Bureau felt that this report and the entire correspondence should be forwarded to the State Division of Public Health.

A letter was received from the publicity chairman of an Indiana county medical society which reads in part as follows:

"The _____(name of newspaper) is anxious to re-establish the radio talks given once weekly by some member of the _____ County Medical Society on some timely topic. They have found out through different surveys that these talks are listened to by a great many people and then when they are published in the paper the same day a large percentage of the readers read this article. I believe that the criticism of the Bureau of Publicity was due to the fact that the doctor's name was used in the broadcast and was attached to the article. The _____(name of newspaper) maintains that the talk and the article lose their interest and value when the author's name is omitted.

"The local society is anxious to start these talks again because they feel that they are very much worthwhile. However we do not wish to do anything which will run counter to the ideas of the State Association.

"I would appreciate very much hearing from you about this matter and having any ideas that you may have as to how we can work it out."

The Bureau instructed the secretary to prepare a letter stating that the Bureau was very pleased to hear that this newspaper desired to reestablish its series of weekly radio talks. The Bureau feels that such talks should be entirely impersonal and should be given in plain, understandable language. Time and again the House of Delegates of the Indiana State Medical Association has gone on record disapproving the mention over the radio of the names of physicians who are in private practice. The Bureau suggests that when these talks are given by physicians who occupy full-time positions with institutions or organizations, such as superintendents of hospitals, heads of city or county boards of health, etc., the use of the names of such men would not be contrary to the action of the House of Delegates. However, the State Association rules do not approve of the use of names of those in practice. Broadcasts and newspaper releases should be impersonal and informative.

Material in regard to the Woman's Auxiliary was given to one member of the Bureau to review and to bring before the Bureau at its next meeting.

A member of the Committee on Public Health Education of the Delaware-Blackford County Medical Society appeared before the Bureau and asked for information in regard to how this committee might carry out a campaign of education of the public through the use of the radio and talks before civic organizations and luncheon clubs. The Bureau made several suggestions to this representative and instructed the secretary to write him in detail concerning this matter.

November 24, 1936.

Present: William N. Wishard, M. D., chairman; F. M. Gastineau, M. D.; E. V. Hahn, M. D., and T. A. Hendricks, executive secretary.

Release for publication in Saturday, December 5, papers, "Colds, Influenza, and Pneumonia."

Request for Speaker:

December 16—Parke-Vermillion Medical Society, Clinton, Ind.

Report on Medical Meeting:

November 10—Fayette-Franklin County Medical Society, Connersville, Ind. "Recognition and Treatment of Congenital Deformities." (20 present.)

Report made to the Bureau on the news letter of October, 1936, of the Woman's Auxiliary to the American Medical Association. The member reporting upon this news letter summarized his report as follows:

"It would seem to me that the outstanding suggestions from this report are: (1) Exhibitions of the doctor's hobbies at the State Medical Meeting. (2) The student loan fund used for medical students, (3) The promotion of Hygeia, and (4) The friendliness among the physicians of the various communities."

Material received from the Wayne County (Detroit) Medical Society in regard to the battle against tuberculosis brought to the attention of the Bureau. This was given to one member of the Bureau to review and to report upon at the next meeting of the Bureau.

INDIANA DIVISION OF PUBLIC HEALTH

BUREAU OF COMMUNICABLE DISEASES

MONTHLY REPORT, NOVEMBER 1936

JOHN W. FERREE, M. D.

Diseases	Nov. 1936	Oct. 1936	Sept. 1936	Nov. 1935	Nov. 1934
Tuberculosis	113	169	167	125	112
Chickenpox	413	110	6	407	438
Measles	25	12	17	41	414
Scarlet Fever	436	354	136	682	731
Smallpox	7	4	0	11	12
Typhoid Fever	5	33	46	11	31
Whooping Cough	82	64	42	150	364
Diphtheria	121	145	41	291	277
Influenza	44	117	33	104	134
Pneumonia	69	53	19	72	29
Mumps	48	24	18	103	14
Poliomeylitis	6	22	13	9	5
Meningitis	6	15	5	6	1
Undulant Fever	1	1	1	0	0
Vincents Angina	0	1	0	5	0
Encephalitis	0	1	1	0	5

SEVENTH DISTRICT MEDICAL SOCIETY

The Seventh District Medical Society held its annual meeting at the Country Club, Franklin, Indiana, November 11th. Members of the Johnson County Medical Society were hosts.

Dr. Howard Mettel, of Indianapolis, talked on "The Activities of the Bureau of Child Health of the Indiana State Board of Health."

Dr. Herbert Call, of Indianapolis, discussed "Skin Tests and Vaccination in Children."

Dr. E. O. Asher, of New Augusta, presented a paper on "Home Obstetrics."

Dr. R. N. Harger, of Indianapolis, talked about the "Present Status of Vitamins."

Dr. Robert Wiseheart, of North Salem, discussed "Anesthesia in the Home."

At 4:30 a panel discussion on "Care of the Child at Birth" was led by Dr. E. M. Pitkin, of Martinsville, and discussants included Dr. Byron Rust, Dr. A. L. Portteus, Dr. Lyman Meeiks, Dr. Harry Murphy and Dr. Foster Hudson.

A dinner was served at 6:30, and at 8:15, Dr. M. Edward Davis, of Chicago, addressed the members, his subject being "The Treatment of Hemorrhage Late in Pregnancy."

Officers were elected at the business meeting in the afternoon as follows:

President, J. H. Grimes, Danville.
Vice-president, E. O. Asher, New Augusta.
Secretary-treasurer, Russell Sage, Indianapolis.

EIGHTH DISTRICT MEDICAL SOCIETY
MADISON COUNTY MEDICAL SOCIETY

The joint meeting of the Madison County and Eighth District Medical Societies was held at St. Johns Hospital in Anderson, November sixteenth. The regular staff meeting convened at five o'clock, and this was followed by a dinner served by the Sisters of the Hospital to the fifty-three physicians registered from Madison, Jay, Randolph, Delaware and Blackford counties.

Following the dinner, the regular business of the county society was concluded, with the election of Dr. Joe King, of Anderson, and Dr. R. O. Russell, of Frankton, as members, and the applications of Drs. Paul Long and Guy Ross, of Anderson, were presented and referred to the board of censors. There being no further county society business, the meeting was turned over to Dr. V. G. McDonald, secretary of hte District Society, who took charge of the meeting in the absence of Dr. R. H. Beeson. Dr. Rozelle acted as temporary chairman.

A nominating committee of one member from each of the four counties present reported the following officers recommended, and they were later elected:

President, Dr. V. G. McDonald, Anderson.
Vice-president, Dr. F. E. Kirshman ,Muncie.
Secretary-treasurer, Dr. E. H. Clauser, Muncie.
Councilor, Dr. M. A. Austin, Anderson.

Inasmuch as the Madison County Medical Society and some of its members have assumed an annual deficit from the district meeting for the past five years, a motion was carried to assess each county in the district twenty-five cents per member annually to cover the ordinary expenses of the district meetings.

The guest speaker of the evening was Dr. Floyd T. Romberger, of Lafayette, who discussed in detail the newer things concerning selective anesthesia, considering the necessity of the anesthetist having a greater knowledge of the patient before deciding upon any one form of anesthesia. Not only the type of patient but also his general condition and his special necessities should be considered before any form of anesthesia is administrated. Dr. Romberger discussed alcohol, ether, chloroform, the newer volatile ether derivatives and the effect of morphine, scopolamine, and the barbiturates as valuable basal helps to reduce the undesirable complications which arise from the over-use of some single anesthetic agent. Spinal anesthesia being too large a subject to be included in the time allotted, Dr. Romherger asked that his remarks be followed by a round-table discussion in which a number of valuable suggestions were brought out, concerning the use of rectal anesthesia and other means of obstetric analgesia, the best form of anesthesia for surgery in children, and the necessity of using the smallest amounts possible of the barbiturates, and in using morphine and atropine, the dosage was usually too small.

The appreciation of the assembly was expressed in a vote of thanks to Dr. Romberger for his presentation, and it is hoped that he can return in the near future to discuss spinal anesthesia.

Letters were read from Dr. Herman Baker, president-elect of the Indiana State Medical Association; Dr. Ed Clark, president (for 1937) of the Indiana State Medical Association, and Mr. Tom Hendricks, executive-secretary of the State Association. All expressed regret at their inability to attend the district meeting, but a previous enengagement required their attendance at the annual meeting of state officers with officers of the American Medical Association in Chicago for a two-day session, November sixteenth and seventeenth.

Meeting adjourned.

M. A. AUSTIN, M.D., *Secretary.*

ELEVENTH DISTRICT MEDICAL SOCIETY

Seventy-five physicians registered for the afternoon session of the fifty-sixth semi-annual meeting of the Eleventh District Medical Society held at Huntington, October 28, 1936. The Hotel Lafontaine was headquarters for the meeting and all sessions were held there.

Dr. J. O. Arnold, of Temple University, Philadelphia, presented a very interesting and up-to-date discussion on the subject of "Eclampsia." Dr. George J. Garceau, of Indianapolis, talked on the subject of "Fractures of the Anatomical Neck of the Femur" and Dr. Paul W. Ferry, of Kokomo, presented a paper on "Ovarian Extracts and Their Uses." Each paper was enthusiastically discussed.

Dr. E. D. Clark, of Indianapolis, president-elect of the Indiana State Medical Association, and Mr. Thomas A. Hendricks, executive secretary of the Indiana State Medical Association, were guests at the meeting and presented short talks.

Attendants at the banquet in the evening, sponsored by the Huntington County Medical Society, numbered 114. Dr. Charles P. Emerson, of Indianapolis, was the speaker, his subject being "Toxic Goiter."

The Huntington County Medical Society members once more proved themselves to be exceptionally good hosts. The visiting ladies were entertained by wives of the members. A program of music, reading, and tea occupied the afternoon.

The next meeting will be held in Wabash in May, 1937.

O. G. BRUBAKER, M.D., *Secretary.*

THIRTEENTH DISTRICT MEDICAL SOCIETY

The annual meeting of the Thirteenth District Medical Society was held November fourth at the Hotel Elkhart, Elkhart.

Dr. William R. Cubbins, of Chicago, conducted an orthopedic clinic in the morning. Following a noon luncheon meeting, Dr. Howard B. Mettel, director of the Bureau of Maternal and Child Health of the Indiana Division of Public Health, addressed the members. Dr. George F. Green, of South Bend, spoke on "Appendicitis," Dr. F. T. Romberger, of Lafayette, talked about "Anesthesia for General Practice," and Dr. L. P. Harshman, of Fort Wayne, presented a paper on "Subnormal Children." In the evening, Dr. Joseph L. Baer, of Chicago, was the principal speaker; his subject was "Recent Developments in Gynecology."

Officers were elected as follows:

President, Dr. J. M. Fleming, Elkhart.
Vice-president, Dr. H. P. Bowser, Goshen.
Secretary-treasurer, Dr. Alfred Ellison, South Bend.
Councilor, Dr. W. B. Christophel, Mishawaka.

COUNTY SOCIETY REPORTS

ADAMS COUNTY MEDICAL SOCIETY met November twenty-seventh in the Decatur city hall. Dr. David I. Schwartz of Fort Wayne was the speaker.

BOONE COUNTY MEDICAL SOCIETY met at the Ulen Country Club, Lebanon, December first, for a noon dinner meeting. Dr. Goethe Link of Indianapolis presented the principal address. His subject was "Diseases of the Para-thyroid Glands." Officers for 1937 were elected as follows:

President, J. R. Porter, Lebanon.
Vice-president, L. S. Bailey, Zionsville.
Secretary-treasurer, C. G. Kern, Lebanon.

CARROLL COUNTY MEDICAL SOCIETY met at Camden, November twelfth, with Dr. Willis D. Gatch of Indianapolis as speaker. Dr. Gatch had for his subject, "Indications for Surgery in the Acute Abdomen."

At the December tenth meeting, held in Delphi, Dr. Arthur Richter of Flora was the principal speaker; his subject was "Nephritis and Its Treatment." Attendance numbered twelve.

Officers for the Carroll County Society for 1937 are:

President, George Beamer, Delphi.
Vice-president, George Wagoner, Burrows.
Secretary-treasurer, E. H. Brubaker, Flora.

CLINTON COUNTY MEDICAL SOCIETY held a meeting at the Coulter Hotel in Frankfort, December third. Moving pictures of "Postpartum Hemorrhage and Complications of Delivery" by DeLee were shown.

Dr. Benson Ruddell of Frankfort was made a member of the society. Officers were elected as follows:

President, C. A. Burroughs, Frankfort.
Vice-president, Robert A. Hedgecock, Frankfort.
Secretary-treasurer, B. A. Work, Frankfort.

DEARBORN-OHIO COUNTY MEDICAL SOCIETY held a meeting at the Dillsboro Sanitarium Hotel in Dillsboro, December third. Judge Joseph E. Goodenough of Covington, Kentucky, spoke on the subject of "Our Laws." Attendance numbered thirty-five. This was the annual banquet meeting, and officers for 1937 were elected as follows:

President, William F. Duncan, Aurora (R. R. 2).
Vice-president, J. K. Jackson, Aurora.
Secretary-treasurer, J. C. Elliott, Guilford.

DEKALB COUNTY MEDICAL SOCIETY held a meeting at the Auburn Hotel, December second, for the annual business meeting and election of officers. Seventeen were in attendance. Officers for 1937 are:

President, Harold Nugen, Auburn.
Vice-president, D. M. Hines, Auburn.
Secretary-treasurer, John P. Showalter, Waterloo.

ELKHART COUNTY MEDICAL SOCIETY members met December third for their annual meeting and election of officers. The meeting was held in Elkhart, with fifty-two in attendance. Officers for 1937 are:

President, Arthur W. Hull, Elkhart.
Vice-president, S. S. Frybarger, Bristol.
Secretary-treasurer, S. T. Miller, Elkhart.

The principal speaker at this meeting was Dr. Herman L. Kretschmer of Chicago who told of a recent trip to Europe and illustrated his talk with moving pictures.

FAYETTE-FRANKLIN COUNTY MEDICAL SOCIETY held a meeting at the McFarlan Hotel in Connersville, December eighth. Dr. J. H. Warvel of Indianapolis presented a paper on "Recent Developments in the Treatment of Diabetes." Attendance numbered eighteen.

Officers of the Fayette-Franklin County Society for 1937 are as follows:

President, Ralph Sappenfield, Brookville.
Vice-President, David Pugh, Connersville.
Secretary-treasurer, R. H. Elliott, Connersville.

FLOYD COUNTY MEDICAL SOCIETY members m
New Albany, December eighth, with Dr. H. F. Beckm
Indianapolis as principal speaker. Dr. Beckman's s
was "The Cause of Toxemia in the Later Stage of Pregna
A motion picture on "The Prevention and Treatme
Eclampsia" was discussed by Dr. Beckman. Attendance
bered fifty.

Officers for 1937 were elected as follows:

President, R. W. Harris, New Albany.
Vice-president, J. W. Baxter, Jr., New Albany.
Secretary-treasurer, P. H. Schoen, New Albany.

FORT WAYNE (ALLEN COUNTY) MEDICAL SOC
met in the Chamber of Commerce, Fort Wayne, Dec
first. Dr. A. J. Sparks gave an illustrated talk on "
agement of Urinary Calculi." Attendance numbered t
six.

GRANT COUNTY MEDICAL SOCIETY members m
Marion, in November, for the annual election of officers
H. A. Miller has served as president since Dr. E. F.
resigned to go to Richmond. Officers for 1937 are:

President, H. A. Miller, Marion.
Vice-President, Ralph E. LeMaster, Marion.
Secretary-treasurer, Harold E. List, Marion.

HENRY COUNTY MEDICAL SOCIETY members m
the Henry County Hospital, in Newcastle, November
teenth, with Dr. Rollin H. Moser of Indianapolis as prin
speaker. Dr. Moser presented a paper on "Treatment of
eases of the Gastro-Intestinal Tract." Number present
twenty-two. Officers elected for 1937 are:

President, Robert A. Smith, Newcastle.
Vice-president, George Wiggins, Newcastle.
Secretary-treasurer, Robert L. Amos, Newcastle.

The December tenth meeting of the Henry County Me
Society was the annual dinner meeting and was held a
Davitt Hotel, Lewisville. Forty-two members and guests
in attendance.

HOWARD COUNTY MEDICAL SOCIETY members
at Kokomo, in the Courtland Hotel, December ninth, f
dinner meeting with wives and friends as guests. Of
were elected for the New Year as follows:

President, J. A. Meiner, Kokomo.
Vice-president, W. J. Marshall, Kokomo.
Secretary-treasurer, Durward Paris, Kokomo.

HUNTINGTON COUNTY MEDICAL SOCIETY mem
met in Huntington, December first, for a business mee
Officers were elected as follows:

President, R. G. Johnston, Huntington.
Vice-president, G. M. Nie, Huntington.
Secretary-treasurer, J. M. Hicks, Jr., Huntington.

INDIANAPOLIS MEDICAL SOCIETY met at the A
Hotel, November seventeenth, when papers on gynecology
obstetrics were presented by Dr. Frank C. Walker an
Dudley Pfaff.

Public sanitation was discussed before the November tw
fourth meeting of the Indianapolis Medical Society.
Harry Jordan, chemical engineer of the Indianapolis
Company, gave an illustrated lecture on "Water Pu
tion in Indianapolis," and Dr. Herman G. Morgan, sec
of the Board of Health, spoke on "Sewage Disposal in I
apolis." Dr. Thurman B. Rice led the discussion.

Officers for the Indianapolis Medical Society for 1937
elected at the December first meeting as follows:

President, Edgar F. Kiser, Indianapolis.

president, Ben Moore, Indianapolis.
d vice-president, Jane Ketcham, Indianapolis.
tary-treasurer, Howard Mettel, Indianapolis.
December eighth meeting, held in the Hotel Antlers, dressed by Dr. E. W. Dyar whose subject was "Eye ns in Childhood," and Dr. Francis C. Smith who talked "Dermatology in Pediatrics." Discussants were Dr. Masters and Dr. John Brayton.
Fred J. Taussig, of St. Louis, conducted a clinic in litorium of the Indiana University School of Medicine, er fifteenth, and in the evening delivered an address the Indianapolis Medical Society at the Hotel Antlers. aussig's afternoon subject was "Various Phases of n," and in the evening he discussed "Septic Abor-

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'ER-NEWTON COUNTY MEDICAL SOCIETY met at 's restaurant in Rensselaer, December third, for a joint with the bar association. Albert J. Stump of Indian- discussed "The Professional Man in His Community" an audience of fourteen physicians and fifteen at- . This was the first time such a meeting has been nd the secretary of the medical society reports an "in- and entertaining meeting."

COUNTY MEDICAL SOCIETY met in Portland, De- fourth, with Drs. C. L. Bock and T. R. Hayes of as principal speakers. Their subject was "Bladder Obstruction." Attendance numbered twelve.

'ERSON COUNTY MEDICAL SOCIETY held a meet- Madison, November thirtieth. Dr. Emmett B. Lamb anapolis presented a paper on "Management of Frac- f the Spine."

X COUNTY MEDICAL SOCIETY held a meeting at vel Cafe in Vincennes, December eighth, with Dr. Louis of Indianapolis as principal speaker. Dr. Segar dis- general pediatric problems. Attendance numbered five. Officers for 1937 are:
dent, E. W. Beckes, Vincennes.
president, R. B. Cochran, Vincennes.
tary-treasurer, J. F. Reilly, Vincennes.

CIUSKO COUNTY MEDICAL SOCIETY members met Hotel Hayes in Warsaw, December eighth. Dr. George ss of Warsaw presented a paper on "Relief of Pain or." An historical review of the Kosciusko County Society was presented, and cases were reported and ed. Officers for 1937 were elected as follows:
dent, J. R. Baum, Warsaw.
president, E. W. Thomas, Leesburg.
tary-treasurer, O. H. Richer, Warsaw.

E COUNTY MEDICAL SOCIETY members held their dinner meeting December tenth at Phil Smidt's res- , near Gary. The dinner meeting was addressed by rris Fishbein. Motion pictures of a Canadian fishing ere shown and commented upon by Mr. Smidt. Of- or 1937 are:
dent, Russell O. Wharton, Gary.
dent-elect, C. M. Jones, Whiting.
tary-treasurer, E. M. Shanklin, Hammond.

GAN COUNTY MEDICAL SOCIETY members met in sville, November eighteenth, when Dr. Norman Beatty ianapolis presented a paper on "Common Skin Dis-

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IROE COUNTY MEDICAL SOCIETY held a meeting ber nineteenth in Bloomington. Dr. Bert Ellis of In- olis read a paper on "Diagnosis of Ear, Nose and Diseases."

'TGOMERY COUNTY MEDICAL SOCIETY members meeting at Crawfordsville, November nineteenth. Dr.

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OBSTETRICS—Informal Course: Intensive Two Weeks Course starting February 1, 1937.

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EAR, NOSE AND THROAT—Informal Course; Personal Courses; Intensive Two Weeks Course starting April 5, 1937.

OPHTHALMOLOGY — Intensive Two Weeks Course starting April 19, 1937.

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Paul Merrell of Indianapolis spoke on "Surgical Procedures in Pulmonary Tuberculosis." The late Shirl Herr, who was president of the Culver hospital, was praised in a resolution adopted by the medical society.

MUNCIE ACADEMY OF MEDICINE held a meeting December eighth, at which Dr. French K. Hansel of St. Louis addressed the members on the subject of "Upper and Lower Respiratory Tract Allergy and Its Relation to Other Manifestations." A moving picture on "Allergy and Anaphylaxis in Experimental Animals" was shown through the courtesy of the Mead Johnson Company.

NOBLE COUNTY MEDICAL SOCIETY met at the Albion Hotel in Albion, December tenth, for its annual meeting and election of officers. A paper on obstetrics was presented by Dr. Charles J. Rothschild of Fort Wayne. Two motion pictures, produced by Dr. DeLee, were presented by the Indiana Division of Public Health.

Officers for 1937 are:
President, J. R. Nash, Albion.
Vice-president, T. N. Siersdorfer, Ligonier.
Secretary-treasurer, W. F. Carver, Albion.

NORTHEASTERN INDIANA ACADEMY OF MEDICINE met at Kendallville, November nineteenth, with Dr. Byron C. Shaffer of Toledo, Ohio, as principal speaker. His subject was "The Surgical Aspect of Peptic Ulcer."

PARKE-VERMILLION COUNTY MEDICAL SOCIETY met at the Vermillion County hospital, November eighteenth. Dr. George J. Garceau of Indianapolis was the principal speaker.

RANDOLPH COUNTY MEDICAL SOCIETY members met at Winchester, November ninth. Dr. Marlow Manion of Indianapolis, was the speaker. Fourteen members attended the meeting.

RUSH COUNTY MEDICAL SOCIETY members elected officers at their meeting, December ninth, in Rushville. They are:
President, Donald I. Dean, Rushville.
Vice-President, R. O. Kennedy, Rushville.
Secretary-treasurer, Robert Spindler, Milroy.

SHELBY COUNTY MEDICAL SOCIETY held a dinner meeting at the Strand Alcazar in Shelbyville, December second. Albert Stump of Indianapolis addressed the members on the subject, "Legal Aspects of Medicine." Officers for 1937 were elected as follows:
President, DePrez Inlow, Shelbyville.
Vice-president, J. A. Davis, Flat Rock.
Secretary-treasurer, W. R. Tindall, Shelbyville.

STEUBEN COUNTY MEDICAL SOCIETY members met in Angola, December eleventh, for election of officers for 1937:
President, L. L. Eberhart, Angola.
Vice-president, B. O. Blosser, Fremont.
Secretary-treasurer, S. S. Frazier, Angola.

THE VIGO COUNTY MEDICAL SOCIETY met in the Union hospital, Terre Haute, November tenth, to hear Drs. O. O. Alexander and A. M. Mitchell present interesting case reports. The Vigo County Tuberculosis Society has asked for an advisory committee from the medical society to aid in their work. Attendance at the meeting was 38.

At the December eighth meeting of the Vigo County Medical Society, Dr. Verne K. Harvey, director of the Indiana Division of Public Health, talked on "Health Aspects of the Social Security Act." Attendance numbered sixty-eight.

Officers elected for 1937 are:
President, Frank G. McCarthy, Terre Haute.
Vice-president, John E. Dailey, Terre Haute.
Secretary-treasurer, A. M. Mitchell, Terre Haute.

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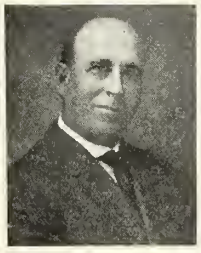
VOLUME 30 FEBRUARY, 1937 NUMBER 2

TREATMENT OF ACUTE NASAL SINUS SUPPURATION IN INFANTS AND YOUNG CHILDREN*

L. W. DEAN, M.D.

St. Louis

Acute nasal sinus suppuration is a not uncommon occurrence in infants and young children. It occurs as a complication of scarlet fever, measles, influenza, the common cold and any other condition causing an acute upper respiratory upset. One must not forget that acute allergic rhinitis is a common cause of acute purulent nasal sinusitis and its common sequela, chronic purulent nasal sinusitis. If allergic rhinitis is an etiological factor, we will not get a satisfactory result from treatment unless this is recognized and proper therapy instituted to control the allergy. Every case should be examined with this in mind. In allergic rhinitis and sinusitis the mucous membrane of the nose is more boggy and pale than in an infectious process. This is due to the allergic edema. The lining of the sinuses, as seen in the roentgenogram, should be more thickened than in infection. An increase in eosinophiles in the nasal discharge is always suggestive of allergic rhinitis. If the Ph of the nasal discharge is alkaline on the fifth or sixth day of the upper respiratory upset, it is suggestive of allergy. In the early days of the common cold the Ph is alkaline but in the last few days it becomes acid. Infectious sinusitis has an acid nasal secretion. If there is a combination of allergic and infectious sinusitis, the acidity of the infection usually overcomes the alkalinity of the allergy and the reaction is acid.



L. W. Dean, M.D.

It is an important thing in the treatment of every case of acute purulent sinusitis to determine whether or not there is an allergic rhinitis. If so, proper allergic treatment must be instituted. It is the edema of the membrane in allergic rhinitis which blocks the ostia of the sinuses, causing stagnation of secretion and resulting infection. The edema of the nasal mucosa in nephrosis may cause purulent nasal sinusitis in the same way.

In known cases of acute allergic rhinitis and in nephrosis it is well to keep the ostia of the sinuses open by the use of vasoconstrictors, as a prophylactic measure for the prevention of acute purulent nasal sinusitis. The prevention of an accumulation of nasal discharge in a nasal sinus or nasal chamber is another important prophylactic measure for the prevention of nasal sinusitis. When infection is present, stagnant secretion makes the condition worse.

The nasal mucus when fresh has a slight bactericidal action. On standing it soon loses this and becomes a good medium for the growth of microorganisms. It has been proved that whenever we produce stagnation of nasal discharge in the nasal sinuses of animals infection always results.

The nasal discharge in the nasal chambers and in the sinuses is moved by the cilia of the cells lining these cavities. These cilia beat in the lower layer of mucus and the movement of the lower layer, by traction, carries the upper part of the mucus with it. In this way the nasal discharge is driven out of the sinuses into the nasal chambers and from the nasal chambers into the nasopharynx. If this mucus becomes too thick the motion of the cilia will not move the upper layer of the mucus and it becomes stagnant, with resulting infection.

The most common cause of the thickening of the nasal discharge is the breathing of air that is too dry. Consequently, as a prophylactic for sinus infection and as a therapeutic agent if the infection has developed, the preservation of normal humidity of the air in the rooms in which the patient lives is necessary. This, with proper ventilation of the rooms, is a most important thing in the treatment of acute purulent nasal sinusitis. If we combine with this, bed rest, proper diet and pediatric treatment, much will be accomplished for the good of the patient.

* Read before the General Session of the Indiana State Medical Association at South Bend, October 8, 1936.

The administration of vitamins will not prevent purulent sinusitis. When, however, the infection has developed, we should be sure that all deficiencies in the vitamins have been met. In this connection, it is well to remember that placing food in an infant's stomach does not mean that it will be utilized by the organism.

The local treatment in acute purulent nasal sinusitis consists in the use of vasoconstrictors, mild antiseptics and the toilet of the nose. Surgical procedures are rarely indicated; even the washing out of a sinus that does not drain properly should be postponed until nature has limited the process. If some complication, as orbital cellulitis or infection of the bones of the face, develops, more energetic measures may be indicated, if conservative procedures are of no avail.

Toilet of the nose is of particular importance in infants. The infant never blows his nose; neither does he aspirate the purulent material in the nasopharynx and spit it out. Consequently the purulent discharge from the nasal sinuses collects in the nasal chambers and remains there. The mucous membrane of the nose is one of the best absorbing membranes in the body. This collection of pus is often responsible for fever of 105° or more in infants. The removal of the accumulated pus in the nasal chambers may result in a marked decrease in the temperature.

Both in the hospital and in the home we usually clean the nasal chambers of infants in the following manner. A small electrically driven aspirator is used. The portable type is best, as it can easily be transported from one part of the hospital to another or to the home. Attached to the aspirating tube is a very small rubber catheter with the end rounded and smooth. This is inserted in the anterior nares and the purulent material removed. The infant is wrapped in a sheet and lies on its back.

Older children who are manageable are treated sitting up. Instead of a flexible catheter a rigid angular tube with a smooth end is used. Using reflected light and the nasal speculum under direct inspection the crevices of the nasal chambers can be cleaned.

Occasionally in infants the fever does not decrease as it should following the toilet of the nose by suction. This may be due to purulent material in the upper posterior part of the nasal chambers and the vault of the nasopharynx. This may be reremoved by irrigation of the nasal chambers. If the irrigation is done properly there is little or no danger of ear complications resulting from its use. The infant is wrapped in a sheet and placed on the abdomen with the chin over the side of the table or bed. Warm sterile normal saline is placed in an irrigator. This can is never placed more than eighteen inches higher than the patient's head. Attached to the end of the flexible tube is the same catheter used in cleansing the nose by suction. The catheter is inserted into one side of the nose and then the other. The fluid escapes from the other side of the nose and the mouth. The nasal chambers and the vault of the pharynx are thoroughly cleansed by this procedure.

Cleansing the nose by suction is done two or three times in twenty-four hours. If irrigation is resorted to, it is usually done only once during that time. If the nose becomes very dirty during the twenty-four hours, the irrigation may be repeated.

After cleansing the nose by suction or irrigation, one per cent ephedrine in normal saline solution is dropped into the nose. We wait fifteen minutes until the tissues are contracted and then drop into each nostril five per cent argyrol or some other mild antiseptic. The nose drops are used with the patient lying on his back with the head tilted far backward so that the upper posterior part of the nasal chambers will be the lowest. If this is not done, the drugs used will not penetrate the upper posterior part of the nasal chamber or come in contact with the roof of the nasopharynx.

SUMMARY

The treatment of acute purulent sinusitis in infants and young children is to eliminate allergic factors. Pediatric treatment, including bed rest, diet, proper hygiene with particular reference to ventilation and maintaining of proper humidity in the air, is of greatest importance. Locally, the use of toilet of the nose by suction or irrigation, followed by vasoconstrictors and mild antiseptics, is of value. All surgical procedures, except in those cases with complications, are contraindicated during the acute stage of the infection.

WASHINGTON UNIVERSITY MEDICAL SCHOOL.

USE OF NON-PADDED PLASTER CASTS TO THE LOWER EXTREMITY*

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There has been an increasing interest in fractures all through medical history. The x-ray gave us information that permitted the more perfect apposition of the fragments. Now the use of non-padded plaster casts reduces the discomfort of the patient and lessens the period of disability during the period that the fracture is immobilized and immediately afterwards. I was glad to see the interest shown in the plaster exhibit at the recent A.M.A. meeting and appreciate the opportunity to demonstrate my results with non-padded plaster casts. This work is not original but the results have been so promising and the casts are so easy to apply that they should be more generally used.

* Presented before the Section on Surgery of the Indiana State Medical Association at the South Bend session, October 7, 1936.

Non-padded plaster casts are indicated in diseases and fractures of the lower extremity that require complete immobilization of the part. The bony fragments must be in good apposition, and there must be no swelling. If a fracture is reduced immediately, a non-padded cast may be applied at once. Swelling usually does not occur in these cases, but if it should occur, and the patient experiences discomfort, the cast should be split, which will give the same usefulness as the padded cast. That is, the part is immobilized. If swelling does not occur, the walking bar is incorporated in the cast and the patient has the added advantage of walking.

If a fracture is not reduced immediately and swelling occurs, a temporary splint should be applied for 10 days to 2 weeks. Overriding of bones and open wounds may require a longer time to prepare the case. By this time, further swelling will not be anticipated and a permanent walking cast can be applied.

APPLICATION OF CAST

The patient is first placed in a comfortable position, usually a supine position. An assistant raises the extremity and flexes the foot to as near a right angle as possible. If the cast is to extend above the knee, the knee is kept nearly straight. A posterior splint is applied the entire length of the cast and extending beyond the toes. A circular layer of muslin is applied holding the plaster near the skin without any wrinkles. Finger indentations must be avoided. The next layer is a circular plaster extending from the metatarsal-phalyngeal joints to above the calf of the leg. This is kept as light as possible and yet heavy enough to hold the fractured parts. We usually wait twenty-four hours before incorporating the iron walking bar. It could be put on at once, but in bending and manipulating to fit the cast, it may cause pressure of the soft plaster.

It takes practice and patience to get the bar on in the right alignment. It must be in the weight bearing line. The patient usually walks better if the bar is posterior so that his weight is thrown slightly forward. The bar should be higher on the lateral than on the medial side to compensate for the lengthened extremity. The rubber padding on the base of the iron bar minimizes any error that may creep in here.

If the fracture is near the knee, the femur should be immobilized in the cast. If the femur is fractured, the cast should include the pelvis and extend well up on the ribs. I have found it best to pad the sacrum and the anterior superior spine of the ilium in these cases.

RESULTS TO BE EXPECTED

The results have been favorable. The casts are comfortable in that patients do not complain of muscle spasm. The patients are ambulatory. Children have attended school in them, women do their house work, and men can do office work or light labor. Some patients had the courage to walk 48 hours after a fracture; others have required longer periods of time.

These casts have a tremendous value in that when they are removed, they leave the muscle tone normal and there is no disability due to weakness. They maintain a good circulation; in fact, patients with varicose veins have been more comfortable in a non-padded cast than before or afterwards.

A few case histories will demostrate these results.

This study was made from 35 patients with fracture or disease of the leg or foot which required immobilization. Later, we treated two fractures of the femur with satisfactory results. This paper will classify the cases in general groups, and a few examples from each type will illustrate the problems encountered and the results obtained.

There were four fractures of the foot, the most severe of which was the fracture of the astragalus. The other 3 cases were comfortable with their casts and walked at an early period. One example of this group is as follows:

W. C., age 22, farm laborer, fell March 17, 1936, on his left heel. X-ray showed a typical compression fracture of the calcaneus with a flattening of the arch and the bone widened at the maleoli. In two weeks' time, Steinman pins were inserted in the calcaneus and tibia, and the correct alignment was obtained by traction. A non-padded plaster cast incorporated the foot and leg, and held the pins in position. Two weeks later, the patient was able to walk about his home. In nine weeks the bone showed some callus formation and absorption of calcium in the ankle bones. The plaster and pins were removed in eleven weeks. He needed help in walking and was unable to work for six weeks after removal of the cast. He works now with some discomfort, but does not limp.

There were 18 cases of fracture of the lower third of the leg. The fibula was involved six times. There were five cases of fracture of the tibia. In seven cases both bones were involved. Two of the latter cases were complicated by dislocation of the foot posteriorly. One example of the group is as follows:

H. B., male, age 34, occupation, beer coil washer, fell while inebriated and complained of a pain in his ankle. An x-ray, after 12 hours, showed fracture of the fibula above the maleolus and a longitudinal fracture at the posterior aspect of the tibia. There was nearly a complete posterior dislocation of the foot and external subluxation with rupture of the tibia-fibular ligament. Blood was aspirated from the ankle joint and novocaine was injected. The dislocation was reduced and an elastic bandage was applied to the swollen parts to aid in reducing the extensive swelling. The parts were immobilized by a posterior plaster shell. After 13 days the swelling had decreased, so a non-padded cast was applied. The walking bar was added on the fourteenth day and the patient walked out of the hospital on the fifteenth day. A few days later,

the patient was taken home drunk from a football game. Three weeks after the accident, he went back to work. He did his usual amount of work except for assistance with heavy lifting. Sixty-one days after the accident, the cast was removed. He was able to walk immediately, but missed two days' work because of some stiffness in the ankle. He wore an elastic bandage for a few weeks and had good end results.

The seven patients with fractures of the middle third of the tibia needed a longer period for the reduction of bones and decrease of swelling. Complete non-padded casts enabled all but one case to be ambulatory during the period of immobilization. The one exception had a compound fracture that drained and required dressings. A non-padded cast was applied, but had to be so weakened by an opening to dress the wound that walking was impossible. The fracture had healed by the time the wound had ceased to drain.

Another case, J. B., age 72, male, had a transverse dentate fracture of the tibia, 16 cm. from the knee joint. An oblique fracture 5 cm. lower also involves the distal tibia. A separate fragment has been formed by these two fractures. Displacement is externally above and mesially below. The fibula fracture is 6 cm. above the upper tibial fracture and the lower is 5 cm. above the lower tibial fracture. The separate shaft fragment is displaced posteriorly. This man was not treated immediately because of shock. Two months of traction with a Steinman pin in the calcaneous reduced the fracture. At this time, the wound was healed, tissue swelling was negligible, and the alignment of the bones was fair. He was sent home in a non-padded plaster cast and was able to get about his house. Three months later, an x-ray showed non-union of the upper fracture which had not improved in another two months. Casts were reapplied which enabled him to walk. An x-ray the first of September, ten months after the accident, showed some improvement. The third cast and walking bar was put on at that time with expectations that union will be complete. This elderly man's general condition has been maintained during the last year by being ambulatory.

There were two fractures of the tibia in the upper third; one case has not reported since the cast was removed, and the other is now comfortable in a non-padded plaster cast.

We had two cases of fracture of the femur. One of these was as follows:

G. E., male, age 10, had a spiral fracture 11 cm. long, 6 cm. above the condyles. The distal fragment was overriding 2 cm. anteriorly. Traction was applied and 22 days later the bones were in good position. On the thirty-third day, a non-padded (except for the ilium and the sacrum) plaster cast was applied, incorporating the pelvis and the right lower extremity. A walking bar was built in, enabling him to get around after the left shoe was elevated. He could even go sliding on a sled. After fourteen weeks, the cast was removed with practically no disability.

We had one case of osteoporosis of the foot that we treated with a non-padded plaster cast. D. B., female, age 52, fell off a stool in June, 1935. There was considerable swelling, but x-ray showed no pathology. She was unable to use the foot because of pain, and five months later, the x-ray showed a marked osteoporosis. A series of non-padded plaster casts had been applied at about three-month intervals. She is able to do her work and is comfortable in a cast. Recent x-rays have shown a gradual improvement of the osteoporosis.

There were three cases of osteomyelitis of the lower end of the tibia. Two cases were typical Brodie's abscesses which were made ambulatory after drainage by the application of a non-padded plaster cast. One of these cases was as follows:

F. S., female, age 12, had pain and swelling of the lower end of the tibia for about 3 years. X-ray showed a small localized abscess in the tibia. This was drained December 27, 1933, and the culture showed a gram negative bacillus. A non-padded plaster cast was applied after drainage had ceased. The leg was thus protected, enabling her to attend school. After immobilization for 70 days, there was no disability later. There has been no reoccurrence after 3 years.

CONCLUSIONS

My conclusions about non-padded casts are as follows:

1. Immobilization is more nearly perfect; less pain is the direct result.
2. The patients are ambulatory.
3. The dangers of muscle atrophy and non-union of bones are minimized and better circulation is maintained.
4. There is less disability after the period of immobilization.
5. They are useful adjuncts not only in treating fractures, but also in treating osteoporosis and osteomyelitis of the lower extremity.

DISCUSSION

WILLIAM DONALD DAVIDSON, M.D. (Evansville): Dr. Wygant has pointed out the increased interest in the treatment of fractures by plaster of Paris casts. This is very encouraging, for it has been my observation that the mere mention of the word "cast" around the hospital causes acute dismay, and the task of applying a cast is considered a most disagreeable one.

The purpose of a cast is to hold the part immobilized and in a certain position, and to afford support. It should be smooth on the inside and outside, should not cause constriction, and should be as light in weight as possible. A plaster cast, properly applied, is an individual splint, moulded to the patient, and will give more satisfaction than any stock splint. The application of a cast necessitates a knowledge of the properties and the use

of plaster by the surgeon and his assistants. The bandages must be handed to the surgeon in such a manner that he can apply them readily without having to turn them over and hunt for the loose end. The bandages must be rubbed in well, so the cast is one firm mass instead of a series of layers. The assistant must hold the limb perfectly still, and must avoid indenting the plaster with the fingers.

The non-padded cast requires a more careful and skilled technic of application than the padded cast. However, I think Dr. Wygant has shown that this extra care is well worth while in the results it gives, and in the comfort it affords to the patient. I have the very decided opinion that if the doctor feels that applying a cast is a disagreeable task, he should not use a non-padded cast, since it is sometimes necessary to apply several casts before one meets the rigid requirements. If a doctor finds the application of a cast disagreeable, he will not be inclined to take those added pains. However, the more one uses plaster, the more he appreciates its use.

I have been using the non-padded cast technic on appropriate cases that entered the hospital on my service for the past fourteen months. I do not use the non-padded casts on patients that cannot be closely followed, or who are apt to be non-cooperative. With a cooperative patient, the non-padded cast is very satisfactory. Several patients who have had casts of both types much prefer the non-padded cast for the reasons Dr. Wygant has brought out.

There are several things that cannot be too strongly emphasized. First, the non-padded cast is not applied in the presence of swelling. At certain points, a small amount of padding in the shape of felt pads is applied to the skin. The non-padded cast is not a circular bandage. It is different; it is made up of a splint applied in a longitudinal direction, and held in place by an encircling bandage. This does not cause constriction, as would be caused if an encircling bandage were applied directly to the skin. I use a little different technic than Dr. Wygant, in that the first slab is applied as a stirrup, laid on the lateral surfaces, moulded very carefully about the malleoli, and passing under the heel. The posterior slab is then applied, and both of these fastened with the encircling bandages. I feel that this gives a little more support. Sometimes instead of the non-padded cast and walking iron, I use a Delbet splint. This employs the same basic principles of the non-padded cast, but does not enclose the foot.

One thing in the use of the non-padded cast, or for that matter, in any cast, should never be overlooked. The cast should always be very carefully moulded to fit the arch of the foot. If this is done, the patient will not have as much discomfort from a relaxed and weakened foot after the cast is removed as he will if this precaution has been omitted.

My conclusions are based on the results that I have had on my service, and they are the same as Dr. Wygant's. I think that the non-padded cast has a decided value, and the results it gives are very satisfactory, but it does require painstaking care in its application.

Gordon W. Batman, M.D. (Indianapolis): I should like to emphasize two things with respect to this problem. First, the patients should be very carefully checked with x-rays before the cast is finally removed, because I think it is true that the majority of bad results from fractures occur from the removal of splintage too early. Second, I think the use of stockinet under the so-called non-padded cast in which the first bandages are applied extremely wet, often helps to get on the cast with more smoothness. A small felt padding around the malleoli often saves compression here.

Charles L. Viney, M.D. (Logansport): I wonder if you could use a longitudinal strip of iron instead of a U-shaped one. It does not seem to raise the foot as high off the ground as do some of the other walking irons.

G. J. Garceau, M.D. (Indianapolis): I so thoroughly agree with what Dr. Wygant said that I have not much to add.

The application of this cast demands some practice. I recommend that anyone who tries this method, first practice the application of the cast. We never shave the part, because the cast remains on long enough so that hte hair on the leg is loosened, and when you remove the cast it is no problem.

I agree thoroughly with the suggestion about the use of stockinet.

The application of the non-padded cast is a little tedious at first, but I think if one masters the few details necessary and applies it well molded, he will be very well repaid because it fulfills the four requirements in the treatment of fractures: first, you must reduce the fracture; second, you must take steps to maintain reduction; third, after you reduce it you must maintain it reduced long enough for union to occur; and fourth, after union occurs, you must restore function. This method of cast application fulfills all these.

R. B. Acker, M.D. (South Bend): There are one or two things I should like to mention in connection with this type of plaster cast. After applying one of these casts do not lose sight of your patient immediately because you may have trouble. Dr. Bohler, of Vienna, the great disciple of the non-padded cast, hospitalizes his patients, so that an untoward effect following the application of a cast may be quickly remedied. If one is going to use a non-padded cast he would do well to read the book written by Schneck, one of Bohler's assistants, in which the technic is described, because the technic is a very important thing. This type of

cast must be put on carefully. If you are not accustomed to this method and not thoroughly familiar with it, do not apply a cast and send the patient away, because you are going to have trouble. You must reduce the fracture; the cast does not reduce it. Even with the non-padded cast, in a fracture below the knee, you must have extension of some sort and reduce the fracture before putting on an unpadded cast. If you think you are going to have swelling, wait a while.

The great advantage of the non-padded cast is that you can put on a walking iron and let your patient be ambulatory. With a padded cast you cannot do that as well. If a non-padded cast is used, the patient should rest in bed with leg elevated until danger of swelling is past, and then a walking iron is applied and the patient allowed to become ambulatory.

M. D. WYGANT, M.D. (Mishawaka) (Closing): I want to thank Dr. Davidson and the other discussants for bringing out some of the many points which I did not have time to mention.

Dr. Viney mentioned a U-shaped iron bar. There are a number of walking bars that are useful. One type has a rubber ring which permits the body to tip or turn.

There are several little details which one has to watch in each individual case, as for instance, in bandaging the malleoli after the plaster has begun to set. It is also a question whether or not we need stockinet. The doctor has to begin to work in plaster and work out his problems.

The question was asked, "How soon do you put on a non-padded cast?" As soon as the fracture is reduced and no more swelling is anticipated. In one case with an open wound, by the time the wound had healed, union had taken place and a complete cast was never applied. In three or four cases the plaster was put on the first day, and in a couple the first hour, or as soon as x-rays were taken. These cases naturally were not complicated. There is no risk in putting on the cast in the first twenty-four hours, if you watch the patient carefully, do not give morphine, and are prepared to take the cast off if necessary.

ARE YOUR 1937 DUES PAID?

VITREOUS OPACITIES*

Etiology, Diagnosis and Treatment

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Our conception of the structure of the vitreous has been somewhat altered as a result of recent studies and advancements in methods of observation. In order to have a better understanding of the formation of vitreous opacities, a brief discussion of the anatomy is appropriate.

The vitreous is a transparent, homogeneous, semi-fluid substance filling the posterior four-fifths of the eyeball. It is avascular and, contrary to the teachings in practically all of the text books, it contains a definite structure which varies in different individuals. This has been conclusively demonstrated with the aid of the slit lamp. The vitreous contains a number of interlacing fibrillæ and laminæ forming an interstitial meshwork. The vitreous is devoid of cells. Nourishment probably is derived from the aqueous. Enclosing the vitreous and extending from the periphery of the optic disc to the ora serrata is the posterior limiting membrane which is sometimes called the hyaloid membrane, and which is merely a condensation of the vitreous meshwork in apposition with the retina. The anterior limiting membrane, which is denser, is that portion lying in apposition to the posterior surface of the lens and the posterior fibers of the suspensory ligament. The limiting membrane is missing for a distance of about two millimeters over the orbiculus ciliaris just anterior to the ora serrata, and also over the optic disc. Because of the absence of the limiting membrane, these sites furnish the usual portals of entry for exudations from adjacent structures.

Opacities in the vitreous are small particles which are present in the vitreous and which are apparent to the patient as black specks of varying sizes and shapes. Opacities may be physiological or pathological in origin. When they are pathological in origin, they are generally due to exudate or hemorrhage into the vitreous as the result of contiguous pathology such as inflammations of the uveal tract or retina, or they may be caused by certain general systemic diseases, trauma of the eyeball, senility, high myopia, or by causes of unknown origin. These particles may be dust-like in character or they may have the form of very fine or coarse granules; they may be flocculent or they may occur in large clumps and masses completely filling the vitreous chamber.

Normally, the vitreous contains no organized elements, but physiological opacities, known as muscæ volitantes, are said to be present in every

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eye. These opacities are the embryonic remains of cells which are semi-transparent and thus undemonstrable by diagnostic means. They are projected by the patient as entoptic images which may have the form of specks, threads, or strings of beads, and they move not only with the eye but also spontaneously. They are best seen if one looks at a uniformly illuminated surface or the sky. While they do not interfere with vision, they are sometimes troublesome to observers using a microscope. Physiologic opacities are more apparent to eyes with myopia, and except for the annoyance which they sometimes produce, they are of no consequence.

In order to detect the presence of floating opacities in the vitreous, the patient's pupils should be widely dilated with a suitable mydriatic and the examination made in a darkened room.

The light from an ophthalmoscope is directed into the eye of the patient and the observer's eye is placed at a distance of six to eight inches from the aperture in order to bring into focus opacities at different depths. By this means it is possible to judge the distance of opacities from the retina. With the eye of the examiner placed six to eight inches from that of the patient, opacities are best seen with a plus 7.00 diopter lens. In looking for vitreous opacities, it is important to request the patient to move the eye up and down and from side to side as this action stirs up the floaters the same as stirring up a glass of muddy water which has settled. This frequently brings into view opacities which otherwise might go unnoticed. Another detail which is of importance, particularly in detecting the very fine dust-like opacities, is to get into a suitable position so that the optic disc forms a background against which the opacities are much more distinct. It is well also to reduce somewhat the intensity of illumination, as very fine opacities are frequently invisible in bright light. Red free light is sometimes used, but its value is somewhat questionable.

With the ophthalmoscope, vitreous opacities may appear as very fine dots or grains of dust, or they may be so fine that the individual granules may not be discernible as such, the appearance being more of a general clouding of the vitreous and the condition is then called diffuse opacity of the vitreous. These dust-like opacities are thought by many to be caused by a previous syphilitic infection and, accordingly, when found, they are of sufficient clinical importance to warrant a Wassermann examination. Vitreous opacities may appear as fine threads, strings of beads, coarse granules or flocculent masses. The latter are usually due to organized exudate or hemorrhage. The more numerous the floating opacities, the more the details of the fundus are obscured and vision impaired, and the redder the pupillary reflex appears. In the case of massive exudates or hemorrhage, there may be only a faint red reflex visible with the ophthalmoscope, or no reflex at all, in which event the pupil looks black. Vision in these cases may be reduced to nil, and because of the inability to see the details of the fundus, the prognosis should be guarded.

Floating vitreous opacities are frequently found in patients with glaucoma, and the diagnosis in these cases is made from the ohpthalmoscopic picture, field studies and tonometric findings. Another class of patients in which vitreous opacities are often associated are those suffering from a cardio-renal-vascular disease and diabetes. Here again, the ophthalmoscopic examination showing the presence of fresh hemorrhages and retinal and choroidal lesions occurring chiefly about the macula and disc is of utmost importance, and these patients should be given the benefit of a complete physical examination, including a Wassermann and both chemical and microscopic examinations of the urine.

Other conditions in which vitreous opacities are found are of less frequent occurrence. Bands of connective tissue may be observed floating in the vitreous attached to the optic disc as in the case of a persistent hyaloid artery, or, as in retinitis proliferans, in which vascularized bands extend from the retina into the vitreous as the result usually of a previous hemorrhage which has become organized. The most frequent causes of this latter condition are the recurrent retinal and vitreous hemorrhages occurring in young adults, often tuberculous in origin, syphilis, cardio-vascular-renal disease, diabetes, anemias, trauma to the eyeball, encapsulated foreign bodies, etc. In elderly individuals, a condition known as synchesis scintillans is sometimes seen in which the floating opacities are highly refractile in character and look like a shower of golden flakes which gradually settle to the bottom of the vitreous cavity when the eye is held motionless. These opacities are crystalline in nature and usually are composed of cholesterin; as a rule, they do not interfere with vision. The diagnosis is easily made as there is no other condition which resembles it. No treatment is indicated. Asteroid hyalitis is another condition seldom seen, of unknown etiology, occurring generally in elderly individuals, in which the opacities are spherical or oval in contour, varying in size, and of a whitish color. They are composed of calcium carbonate crystals and apparently produce no damage. No treatment is advocated for their removal. The presence of parasites in the vitreous, while of rare occurrence, is occasionally found. The diagnosis is made by the ophthalmoscopic picture. Treatment consists of surgical removal.

In addition to the hemorrhages occurring spontaneously in choroiditis, in retinitis, in high degrees of myopia and in arteriosclerosis with atheromatous changes in the blood vessels, one of the commonest causes of vitreous opacities is hemorrhage

resulting from trauma to the eyeball either from perforating or non-perforating injuries. Disturbance in vision in these cases depends on the amount of hemorrhage produced, and to the extent of the injury to the structures on the inside of the eyeball. Another source of hemorrhage may be from a ruptured aneurysm of the central retinal artery. Wagoner and Foster recently reported two cases of rupture of an intracranial aneurysm with hemorrhages into the retina and vitreous. Rupture of an aneurysm of the circle of Willis is usually manifested by a sudden apoplectiform attack together with signs of meningeal irritation, and the presence of blood in the spinal fluid. According to these authors, hemorrhages occurring in the retina about the optic discs, associated with sudden onset of severe headache and coma, is suggestive of subarachnoid hemorrhage.

The recurrent mass hemorrhages into the retina and vitreous occurring in young adults, and of doubtful etiology, are frequently seen and are extremely important, not only because of the impairment of vision which is produced, but also because of the unfavorable outcome which often ensues. The condition usually affects males between the ages of 18 and 30 years. Repeated attacks of blurred vision due to slight or extensive hemorrhage into the retina and vitreous of one or both eyes is the characteristic feature of the condition. When the hemorrhage is extensive, all details of the fundus may be obliterated, the hemorrhage completely filling the vitreous chamber, and often not even a red reflex is obtainable. The hemorrhage may absorb partially or completely, accompanied by gradual improvement in the vision, only to be followed by another one. In the intervals between the attacks, the source of the hemorrhage may be discovered frequently to be a lesion of one or more of the retinal vessels. Patches of choroidal atrophy also may be found, but it is thought that the primary lesion in all cases of recurrent hemorrhage is a diseased condition of the walls of the retinal veins. In the cases in which the hemorrhage is not absorbed, the condition may result in proliferation of new vessels into the vitreous from choroidal inflammation and followed perhaps by a detachment of the retina.

The etiology of these cases is uncertain. Many observers believe that tuberculosis is the underlying factor in the majority of cases. Other causes of recurrent hemorrhage which have been found are constipation, focal infection, syphilis, adrenal dysfunction and menstrual disturbances.

Treatment of vitreous opacities is frequently attended with brilliant results, the ultimate outcome being much more favorable than the ophthalmoscopic appearance during the active stage would seem to indicate. On the other hand, in the cases of hemorrhage of the recurrent type, of questionable etiology, the treatment is frequently very discouraging and disappointing. In general, it may be said that treatment should be directed to the underlying cause, and also toward the absorption of blood and exudate in the vitreous.

In cases in which the etiological factor can be definitely determined, specific treatment can, of course, be directed toward improving and correcting the condition. Constitutional errors should be corrected, constipation relieved, and foci of infection removed. Too much emphasis can not be placed on the importance of a thorough investigation of the teeth and nasal accessory sinuses including roentgenographic examinations, and the tonsils and gastro-intestinal tract as possible sources of infection. High blood pressure should be reduced and the elimination stimulated. Hypodermic injections of pilocarpine 1/10 to 1/2 grains daily are recommended by deSchweinitz. While specific anti-leutic treatment is, of course, indicated in all cases of syphilitic origin, the use of mercury and the iodides in large doses has been attended with very beneficial results in many cases of questionable etiology. The use of these drugs, however, should be avoided if there is any evidence of tuberculosis. Calcium therapy and the injection of whole blood have been suggested to control the hemorrhage in cases of obscure origin.

In cases of hemorrhage of the recurrent type, in which tuberculosis is the underlying factor, good results have been obtained with the tuberculin treatment starting with a very small initial dose (1/50,000 mg. to 1/5,000 mg.) and gradually increasing the amount at each injection. The injections are usually given twice a week and continued for about 15 to 20 weeks, or until the patient will tolerate 1 to 5 mg. without a reaction. In using tuberculin, it is important to watch for focal reactions in the eye which are considered of much more importance than a general reaction. When such a reaction occurs, the subsequent injection should be of smaller dosage. Favorable results have also been reported in these cases from the use of intravenous injections of gold sodium thiosulphate. A series of these injections may follow the course of tuberculin treatment as outlined.

Treatment is generally more successful in the cases of recent opacities. Older opacities have a tendency to resist treatment and may remain permanently. In the case of hemorrhage, when seen early, rest in bed for several days is indicated. General absorptive treatment as already outlined is administered, and locally the instillation of 5 per cent dionin is useful. The essayist favors the subconjunctival injection of several minims of dionin, and while a severe reaction is produced, the beneficial results obtained are of more importance than the slight discomfort caused by the injection. When the opacities are caused by exudate or hemorrhage due to disease of contiguous structures, the recognized local and general treatment for the condition should, of course, be employed.

CASE REPORT

Mr. E. L. A., age 37, first consulted me on August 26, 1933, with the history that for three years he has noticed small dark spots and lines before the right eye, which have gradually become more pronounced. He had no symptoms in the left eye until a month ago when he noticed some dark specks floating before that eye. He has never worn glasses. He had his tonsils removed three years ago and a year ago an x-ray of the teeth and a Wasserman examination were negative. He has no nasal discharge except during an occasional cold. His general health is excellent.

External examination of the eyes was negative, the vision of the right eye was 15/20 minus 3; left eye 15/15 plus 3, and a refraction under a cycloplegic showed the eyes to be emmetropic. Ophthalmoscopic examination revealed numerous coarse flocculent and thread-like floating opacities in the vitreous of both eyes which were much more pronounced in the right. The details of the fundi appeared to be normal. Examination of the nose and throat was essentially negative. A general physical examination failed to reveal any foci of infection and was otherwise negative.

The patient was treated locally with dionin and because of the aggravated condition in the right eye, the dionin was injected subconjunctivally and an intravenous injection of sodium iodide was given. The local treatments were given twice a week and the intravenous injection of sodium iodide at weekly intervals. The treatment was continued until the latter part of October, at which time the vision had improved to 15/15 minus 3 in the right eye and 15/10 minus 2 in the left eye. Ophthalmoscopic examination showed some clearing in the opacities. At this time a small central lesion about three or four millimeters in diameter could be seen at the upper temporal edge of the macula, which was slightly hemorrhagic in appearance, fairly fresh and unpigmented. A similar lesion could be seen in the left eye on the nasal side of the macula, but smaller in size.

The patient was referred to Dr. Harry Gradle, who was of the opinion that the lesions in the fundi were tuberculous in character. Accordingly, a tuberculin test was made and it was found that 0.0001 of dilution D old tuberculin gave a positive reaction. The patient was then started on a series of tuberculin injections, the initial dose being 1/100,000 milligrams, which was gradually increased at weekly intervals. The treatment was continued over a period of months until April, 1935, when the patient had a slight reaction and the tuberculin was discontinued, and weekly injections of gold sodium thiosulphate substituted. At this time the lesions in the fundus had cleared considerably, although there were still numerous masses of floating opacities. The general treatment was continued by the patient's home physician and I did not see him again until early in November, 1935, at which time his eyes appeared to be somewhat improved.

In July, 1936, the patient was examined by Dr. C. A. Clapp, of Baltimore, who found that he had two definitely infected teeth which he had removed. Dr. Clapp also found that the patient still showed a positive reaction to 0.0001 milligrams of tuberculin. While he was of the opinion that there was no active process in the eyes, he thought that another course of tuberculin treatment should be given. I have not examined the patient since his return from Baltimore, but I feel that, on the whole, the condition of his eyes has shown much improvement since his treatments were started.

CONCLUSIONS

(1) Vitreous opacities may vary in size from the very fine, almost microscopical, dust-like opacities which many feel are characteristic of syphilis, to the coarse granular and flocculent types which may partially or completely fill the vitreous cavity, with a proportionate reduction in vision.

(2) Opacities in the vitreous may be physiological or pathological in character. When physiological, they generally have no significance.

(3) Pathological opacities may be due to local trauma or disease of the structures in the eyeball, to myopia of high degree, to general systemic disease, or they may be of unknown origin.

(4) Opacities occurring as a result of recurrent hemorrhage into the vitreous in young adults are frequently of tuberculous origin, are very serious in nature, and the prognosis, regardless of etiology, should be guarded.

(5) Recent opacities are more amenable to treatment than those of long standing.

(6) It is of the utmost importance to discover, if possible, the etiological factors, special emphasis being placed on foci of infection.

(7) Treatment is directed to the underlying cause, and also towards the absorption of exudate and hemorrhage in the vitreous.

406 West Berry Street

DISCUSSION

E. O. Alvis, M.D. (Indianapolis): Dr. Bulson has covered the subject of vitreous opacities as fully as possible in the time allotted to him and has consumed a lot of effort in putting together his views of this subject.

An understanding of the anatomy of the vitreous as it was given you is important and aids us in our conception of how exudates from surrounding structures get into the vitreous and it is possible that this is done mainly by wandering cells.

Embryologically the vitreous is interesting in that it develops from both ectoderm and mesoderm and is developed between the optic cup and crystalline lens. Primarily it is formed by a series of

fine protoplasmic fibers that project forward from the retinal cell layer of the optic cup and form a delicate reticular tissue spoken of by Dr. Bulson as inter-lacing fibrillae forming the interstitial meshwork. These fibers are seen at first in relation to the whole of the optic cup but are later limited to the ciliary region where by the process of condensation they appear to form the ciliary zonule. When the mesoderm enters the optic cup through the choroid fissure it unites with this reticular tissue to form the vitreous body.

Very minute vitreous opacities are frequently spoken of as "vitreous dust" because they can not be observed as discrete opaque bodies, but there is a uniform obscuring of the fundus occasionally called a "veiled fundus." This veiling affects all parts of the fundus, the peripheral as well as the central portion. The more numerous the opacities the more hazy the fundus and because of this the pupil seems more red than normal. The veiling of the peripheral portion as well as the central portion differentiates it from retinal opacity, in the former the fundus appears absolutely clear, seen only as through a fog whereby the darker portions, the veins, are more clear but grayish and the brighter portion, the disc, has a reddish hue. The patient sees a cloud before his eye, yet his visual acuity has suffered but a little, while if there is a marked dimness of central visual acuity some disturbance of his retina is present. In opacities of the retina a veil of a grayish or whitish color obscures the fundus and the superficial vessels remain visible, while the portions of vessels that dip down into the deeper retinal tissue layers and also the deep lying finer vessels are either indistinct or entirely obscured. This opacity accompanying inflammation depends on edema or exudation from the retina and is more markedly developed near the papilla and as a rule the diffuse clouding is diminished and finally lost near the periphery.

Dr. Bulson spoke of efforts to prevent recurrent hemorrhages in young adults which are thought to be due largely to tuberculosis. Gold sodium thiosulphate was used many years ago in treating skin tuberculosis. During the last few years its usage has been revived for the treatment of tubercular lesions of the eye. The selection of patients for its administration has not been limited to patients with manifest tuberculosis of the eye but is given many in whom clinical and biological evidences of active tuberculosis could not be proven. The pharmacological action has not been explained; however, much benefit has resulted from its use. It is poorly tolerated by debilitated patients or those with active febrile pulmonary tuberculosis. The same is true in patients with advanced liver and kidney disease. I have never experienced any reaction from its use except an occasional mild local ocular exacerbation of pain which passes away after a short period of time. Should a generalized systemic reaction of an anaphlyctic nature occur it is of short duration and can be controlled with alkaline catharsis, bed rest and alkalinization of the patient. The initial dose is 10 milligrams in 10 cc. of distilled water given intravenously and repeated each third day increasing the dosage by 10 milligrams each administration until a maximum of 50 milligrams is reached. Every third day thereafter the injection of 50 milligrams is given and is continued until 20 injections have been made. It is well to rest 6 to 8 weeks before a second series is given.

Calcium gluconate may be of value in types of vitreous opacities. Calcium has been used for many decades in the treatment of tuberculosis. The gluconate of calcium seems to be of more value in eye therapy than the other calcium salts. It is not only valuable in tuberculosis of the eye but in ocular inflammations from other causes, particularly cyclitis and uveitis. It aids in the rapid relief of pain and dilatation of the pupil. Its importance lies in the fact that permeability of cells and capillaries is increased by lime deficiency and permeability is decreased by lime excess thereby helping to prevent exudation by its use. Its administration hastens absorption of exudates from the anterior chamber and vitreous by increasing phagocytic action. It is given in 15 grain doses either intravenously or intramuscularly as often as every day if needed.

These two drugs are not specifics but are valuable adjuncts to other ocular therapy for vitreous opacities.

ABSTRACT

THE PHYSICIAN AND THE TRAFFIC PROBLEM

LOWELL S. SELLING, Detroit (*Journal A.M.A.*, Jan. 9, 1937), is of the opinion that the chief reason for criticism of the tests proposed in some states and now given to drivers in others, which should be of interest to physicians, is the fact that these tests in themselves do not separate the good from the bad driver. Many of the driving difficulties are due to emotional handicaps or arise from some temporary physical condition that is correctable or that might not occur again in the same individual during the rest of his life. Under these conditions the mere physical examination, a mere check-up of the eyesight, or a brief psychologic test, such as the Binet or some simpler test, would fail to reveal why the man under consideration had his accident or why he is a chronic law violator. Until physicians themselves give these examinations, compile data and show just where the line must be drawn between adequate and inadequate physical capacities, licensing by means of physical and mental tests will be more or less of a farce. A mere physical handicap is no contraindication to driving, and it requires the decision of an experienced and highly trained individual to make a determination. The features which the physician must consider when mapping out plans for making examinations for driver's license, or examining offenders or persons involved in accidents, from the physical and mental standpoint, are the general physical condition, the eye examination and mental deviations.

A COMPARATIVE STUDY OF THE COMPLICATIONS AND DEATHS IN 2,000 ANESTHETICS*

GEORGE M. ROSENHEIMER, M.D.
South Bend

Complications of anesthesia may include any untoward reactions manifested by the patients from the beginning of the administration of the anesthetic until the termination of treatment for that condition for which the patient was anesthetized. In other words, a complication may manifest itself within a few seconds after beginning the anesthetic, or it may cause disability or death, days, weeks or months later. Therefore, when any incident occurs which interrupts the patient's recovery, the etiology of which cannot be accounted for, you should try to determine the role played by the anesthetic in causing such complications.

Statistical reports generally are not very interesting, nor do they mean a lot to anyone but the person who compiles them. However, if they are honestly made and well explained, they should be valuable to others for comparison. About one year ago I became interested in my first anesthetics, so I began a study of the complications and deaths in my first 2,000 cases. These anesthetics were all given at one hospital, and all were given by the old method. The data were obtained from the operating room, during postanesthetic visits, and from the clinical records.

Tables 1, 2, and 3 include data on the total number of cases, without details. Inspection of tables following will show the complications that are included in each system. These tables *are based on the number of cases with complications* and not the incidence of complications. For example, one case may have more than one complication in one or more systems.

TABLE NO. 1.

NUMBER OF CASES BY AGENTS

Agent	No. of Cases	Percentage of Total
Ethylene	941	46.25
Nitrous oxide	774	38.05
Ether	233	11.45
Spinal	78	3.85
Avertin	9	.40
Total	2,035	100.00

TABLE NO. 2.

NUMBER OF CASES BY SYSTEMS

Service	No. of Cases
Dental	20
Ear, Nose and Throat	173
Eye	10
Genito-urinary	31
Gynecology and O. B.	788
General Surgery	1,013
Total	2,035

* Presented before the Section on Anesthesia of the Indiana State Medical Association at South Bend, October 7, 1937.

TABLE NO. 3.

PERCENTAGE OF CASES WITH POSTOPERATIVE COMPLICATIONS IN WHOLE SERIES

	No. of Cases	Percentage of Total
Respiratory	438	21.5
Circulatory	19	.93
Genito-urinary	360	17.6
Gastro-intestinal	588	28.7
Nausea and Vomiting	1,035	50.8
Central Nervous	1,189	58.4

TABLE NO. 4.

A DETAIL STUDY OF THE INCIDENCE OF VARIOUS POSTOPERATIVE COMPLICATIONS BY SYSTEMS AND AGENTS

A. RESPIRATORY SYSTEM

	Ethylene	Nitrous Oxide	Ether	Spinal	Avertin
Dyspnea	4.23	1.15	.42	6.4	0
Cough:					
Slight	12.5	2.3	6.0	23.0	0
Severe	4.08	1.64	2.1	6.4	0
Chest Pains	3.2	1.10	0	1.2	11.1
Bronchitis	.42	0	0	0	0
Hiccough	2.7	.64	.42	3.7	11.1
Laryngitis	.31	0	0	0	0
Atelectasis	.63	0	0	0	0
Pneumonia:					
Lobar	.31	0	0	0	0
Broncho	0	.38	0	2.5	0
Hypostatic	0	0	0	0	0
Cyanosis	1.1	.37	1.62	1.2	0

B. CIRCULATORY SYSTEM

	Ethylene	Nitrous Oxide	Ether	Spinal	Avertin
Epistaxis:					
Slight	.63	.12	.85	0	0
Severe	.21	0	0	0	0
Cardiac Pain:					
Slight	.53	0	0	0	0
Severe	.21	.12	0	0	0

C. GENITO-URINARY

	Ethylene	Nitrous Oxide	Ether	Spinal	Avertin
Catheterization:					
Moderate, 1 to 3 days	20.7	10.2	1.62	25.4	11.1
Severe	2.7	1.6	1.27	2.4	0

D. GASTRO-INTESTINAL

	Ethylene	Nitrous Oxide	Ether	Spinal	Avertin
Gas Pains	30.8	10.1	2.9	54.9	66.6
Dysphagia	.41	.12	0	2.5	0
Parotitis	1.06	.37	.85	0	0

E. CENTRAL NERVOUS

	Ethylene	Nitrous Oxide	Ether	Spinal	Avertin
Vertigo	3.3	.9	0	2.5	0
Backache:					
Moderate	20.6	9.8	3.4	11.5	11.1
Severe	3.01	.89	.42	5.0	0
Headache:					
Moderate, 1st day	19.1	15.2	8.1	19.2	11.1
Severe	4.71	2.82	3.0	8.2	22.2
Diaphoresis:					
1st day	7.2	2.5	4.2	6.4	11.1
2nd day	19.6	6.5	13.3	30.7	0
3rd day	.53	.12	.42	1.2	0
Carphology	0	.12	0	0	0

F. NAUSEA AND VOMITING

	Ethylene	Nitrous Oxide	Ether	Spinal	Avertin
Nausea:					
1st day	19.0	7.6	6.8	7.6	66.6
2nd day	.95	.57	0	0	0
3rd day	0	0	0	0	0
Vomiting:					
1st day	43.3	18.3	36.9	24.3	33.3
2nd day	13.2	4.1	15.0	10.2	33.3
3rd day	.85	.51	.85	0	11.1

Table No. 4 shows that spinal anesthesia has the greater percentage of postoperative dyspnea, cough, catheterizations, dysphagia, headaches and diaphoresis on the second day.

In the small series of avertin cases, this agent showed a greater percentage of postoperative chest pains, hiccough, gas pains, severe headaches, and first day nausea, and second and third day vomiting.

Ether did not have a single pneumonia, probably due to the short duration of these anesthetics.

Nitrous oxide had fewer complications, but these anesthetics were mostly for obstetrical cases, which are interrupted types and of short duration.

TABLE NO. 5.

A DETAIL STUDY OF OPERATIONS BY EACH SERVICE ALSO AGENTS USED FOR VARIOUS OPERATIONS

1. DENTAL

	Total	Nitrous Ethylene Oxide	Ether	Spinal	Avertin
Extractions	20	0 20	0	0	0

2. EAR, NOSE AND THROAT

	Total	Nitrous Ethylene Oxide	Ether	Spinal	Avertin
T. and A.	107	2 0	105	0	0
Oesophagoscopy, Bronchoscopy	6	0 0	6	0	0
Mastoidectomy	36	0 15	21	0	0
Paracentesis	2	0 2	0	0	0
Harelip	2	0 0	2	0	0
Skin graft	3	2 0	1	0	0
Tear sac repair	1	0 0	1	0	0
Parotid cyst	1	0 1	0	0	0
C. A. of ear	1	0 1	0	0	0
Maxillary sinus	5	0 3	2	0	0
Frontal sinus	1	0 0	1	0	0
Brachial cyst	2	1 1	0	0	0
Thyroglossal cyst	1	1 0	0	0	0
Injection of carotids	1	1 0	0	0	0
Irrigation of sinus	1	0 1	0	0	0
C. A. of tongue	1	0 0	1	0	0
Nasal polyps	1	0 0	1	0	0
Sinus thrombosis	1	0 0	1	0	0
Total	173	7 24	142	0	0

3. EYE

	Total	Nitrous Ethylene Oxide	Ether	Spinal	Avertin
Enucleation	5	1 4	0	0	0
Foreign body	1	0 0	0	0	1
Cellulitis	1	1 0	0	0	0
Strabismus	1	0 0	1	0	0
Needling	1	0 0	1	0	0
Iridectomy	1	0 0	1	0	0
Total	10	2 4	3	0	1

4. GENITO-URINARY

	Total	Nitrous Ethylene Oxide	Ether	Spinal	Avertin
Suprapubic prostatectomy	2	1 0	0	1	0
Cystoscopic	5	1 4	0	0	0
Renal stone	2	2 0	0	0	0
Nephrectomy	4	2 2	0	0	0
Orchectomy	2	1 1	0	0	0
Undescended Testes	1	0 0	0	1	0
Hydrocele and Varicocele	1	1 0	0	0	0
C. U. Plastic	1	1 0	0	0	0
Circumcision	4	1 3	0	0	0

Ruptured bladder	1	0	1	0	0	0
C. A. of bladder	1	0	0	0	1	0
Castration	1	1	0	0	0	0
Hypospadias	2	1	1	0	0	0
Urethral caruncle	2	0	2	0	0	0
Kidney fixation	2	1	1	0	0	0
Total	31	13	15	0	3	0

5. GYNECOLOGY & O. B.

	Total	Nitrous Ethylene Oxide		Ether	Spinal	Avertin
Delivery	429	0	396	33	0	0
Cesarean	42	22	15	0	5	0
Salpingectomy	41	34	3	2	1	1
Hysterectomy	58	48	8	0	1	1
D. and C.	89	67	20	0	2	0
Perineal repair	24	13	6	5	0	0
Ectopic pregnancy	18	14	4	0	0	0
Ovarian cyst	12	0	0	10	2	0
Induction of labor	4	0	4	0	0	0
Endometrial biopsy	5	5	0	0	0	0
Imperforated hymen	2	2	0	0	0	0
Cervical polyp	3	0	0	3	0	0
Pelvic abscess	3	3	0	0	0	0
Oophorectomy	1	1	0	0	0	0
Cauterization of cervix	16	0	16	0	0	0
Radium to cervix	24	24	0	0	0	0
Uterine suspension	9	9	0	0	0	0
Bartholin abscess	8	6	2	0	0	0
Total	788	248	474	53	11	2

6. GENERAL SURGERY

	Total	Nitrous Ethylene Oxide		Ether	Spinal	Avertin
Appendectomies	338	277	44	6	10	1
Herniotomies	121	82	34	4	1	0
Rectal	29	14	7	0	8	0
Osteomyelitis	13	8	4	0	1	0
Cholecystectomies	55	39	11	0	5	0
Laparotomies	31	22	7	1	0	1
Thyroidectomies	39	28	11	0	0	0
Breast amputations	28	13	15	0	0	0
Abscesses incised	58	29	29	0	0	0
Lacerations sutured	24	5	16	3	0	0
Finger amputations	20	10	10	0	0	0
Fractures	134	28	95	11	0	0
Leg amputations	3	1	0	0	2	0
Arm amputations	4	4	0	0	0	0
Gastro-enterostomies	22	15	3	0	4	0
Colostomies	11	4	5	0	2	0
Intestinal obstruction	8	8	0	0	0	0
Club-foot	4	1	2	1	0	0
Tenetomies	11	4	7	0	0	0
Empyemas	8	5	2	1	0	0
Dislocations	3	1	0	2	0	0
Tendon repairs	12	7	0	4	1	0
Reclosing abdominal incisions	8	6	2	0	0	0
Pilonidal cysts	4	3	1	0	0	0
Pancreatic cysts	2	0	2	0	0	0
Colon resection	2	2	0	0	0	0
P. O. Hemorrhage	4	1	2	1	0	0
Splenectomies	2	1	0	1	0	0
Pyloric stenosis	2	0	0	2	0	0
Miscellaneous	13	9	0	3	0	1
Total	1,013					

TABLE NO. 6.

DEATHS

Total deaths were 54, or 2.64% of the whole series of 2,035 anesthetics, of which 50, or 2.45%, occurred within the first 14 days.

DEATH BY AGENTS

Agent	No. of Cases	Deaths	Percentage
Ethylene	941	32	3.4
Nitrous oxide	774	11	1.4
Ether	233	5	2.1
Spinal	78	6	7.6
Avertin	9	0	0

TABLE NO. 7.

TIME OF DEATH FOLLOWING OPERATION

	No. of Cases	Percentage of Deaths	Percentage of Cases
During operation	1	.18	.04
Day of operation	3	5.92	.14
2nd and 3rd day after operation	24	44.9	1.17
4th to 7th day after operation	17	32.4	.83
8th to 14th day after operation	5	9.2	.28
14th to 28th day after operation	2	3.7	.09
After 28 days	2	3.7	.09
Total	54	100.00	2.64

The one case of death during operation was a colored female from the outpatient clinic who came in for removal of stone of the bladder. She was given nitrous oxide for about ten minutes, then she suddenly stopped breathing and became pulseless. Artificial respiration with oxygen and carbon dioxide mixtures was administered for nearly an hour, but the patient was dead. Autopsy showed thrombosis of the coronary artery.

The greatest number of postoperative deaths occurred on the second and third days, and next on fourth to seventh days.

TABLE NO. 8.

CAUSES OF DEATH

	No. of Deaths	Percentage of Deaths	Percentage Total Cases
Circulatory	14	25.90	.67
Respiratory	5	9.20	.28
Carcinoma	3	5.50	.14
Peritonitis	24	44.40	1.19
Meningitis (CNS)	4	7.50	.19
Uremia	1	1.90	.04
Septicemia	2	3.70	.09
Anesthesia	1	1.9	.04
Total	54	100.00	2.64

Table No. 8 shows peritonitis to be the greatest cause of the postoperative deaths, and, in second place, circulatory complications.

CONCLUSION

We have the habit of assuming that certain classical and characteristic complications follow a given anesthetic, but one does not realize the number of complications attributable to anesthesia until a detailed study of the clinical charts is made. Also there is an interrelationship between complications.

DISCUSSION

E. E. PADGETT, M.D. (Indianapolis): From the standpoint of the man operating on these patients, I have been following these problems of anesthesia for some time, and I worked a long time to get away from ether. We have tried ethylene by itself, then a combination of avertin and ethylene, watching for postoperative vomiting and gas. Then we tried cyclopropane alone, which gave more vomiting, but the combination of avertin and cyclopropane, I believe, is the ideal combination of anesthesia from the surgical standpoint, and from the patient's standpoint as well.

E. T. ZARING, M.D. (Terre Haute): I would like to ask about this pain and headache mentioned. Were these severe with avertin, and how long did they last?

LILLIAN MUELLER, M.D. (Indianapolis): We use a good deal of avertin in our hospital. We have used it very extensively in the last year—I think 27 per cent of our general anesthetic cases had avertin as a basal. I cannot give any statistics about gas pains, but I have never had that called to my attention. It is my feeling that gas pains are not more common with avertin than with any other type of anesthesia.

M. M. PIPER, M.D. (Rochester): I spoke about avertin last year, and at Rochester we give even more—we go as high as 90 per cent. We do not use morphine with it. We do not notice that postoperative gas pains are more prevalent than with ether or nitrous oxide or any other anesthetic that does not have avertin as a basal.

S. C. WAGNER, M.D. (Elkhart): I think we all noted these things. The question I would like to ask the essayist is relative to nausea. There was nothing said about preoperative morphine. It seems to me that the patients who are nauseated following gas are those who have had morphine preoperatively.

J. Y. WELBORN, M.D. (Evansville): I would like to speak about another thing. I think the surgeon is to blame for the result in some of these cases. I want to speak about the giving of physics before operation. My experience has been that there is always more gas pain following any type of anes-

thetic if a physic has been given prior to operation. I think so far as morphine is concerned, it would have no effect either way in the abdomen. If anything, it would be in favor of morphine because it is somewhat an assistant to any type of anesthetic. When we form an opinion as anesthetists, we should take into consideration the rough handling of tissues, the use of retractors, and the general care of the patient.

Dr. George M. Rosenheimer (closing): In reply to the question of headaches, I think some of the complications which were mentioned were due to other things, but where they were not explained by the chart or the doctor in charge, we put them down as due to anesthetic. In the whole series of spinal anesthesias that we had, I have not had more than three of what we used to call spinal headaches. These were more the dull type; the way they are marked, severity, etc., with the number of days, was not intended to be so much an indication of the degree of headache. We use Dr. Romberger's method. I have had only three cases that I would say were spinal. Many people get a headache after lying in bed.

With reference to avertin, in mose cases this was given to highly nervous women. That type of patient wants to go to sleep in her room and still be asleep when she returns from the operating room. If there was pain indicated on the chart, it was put down. I think nervous patients always will have gas pains. It was not called to my attention until we began to look at the charts.

I think all this series had morphine. A lot of the vomiting was morphine vomiting. But just to start an argument and get various opinions, we put the vomiting down as due to the anesthetic. Practically all our patients get morphine; even with the barbiturates they get a small dose, except in emergencies.

I would like to mention another thing in connection with the use of physics preoperatively. Many men give an enema just before the patient goes to the operating room, and the patient does not expel all of it. Such patients are going to have gas and have distention. The anesthetist has to watch the patient and the surgeon has to handle the intestines more. Sometimes it is necessary to wait until the enema is expelled. These patients will be full of gas and that makes it difficult for the anesthetist.

FEBRUARY FIRST IS THE DEADLINE

IF YOUR DUES ARE NOT PAID NOW — YOU ARE DELINQUENT

PUBLIC SPEAKING

REPORT OF THE COMMITTEE ON PUBLIC SPEAKING OF THE INDIANA UNIVERSITY SCHOOL OF MEDICINE

COMMITTEE:

M. Joseph Barry, M.D., Chairman
Thurman B. Rice, M.D.
Edgar F. Kiser, M.D.

The Medical Council of the Indiana University has for the past six months been devising ways and means through which the written and oral English of the students and interns could be improved. The primary purpose is to produce physicians who will be able to write and speak properly before assemblies of physicians or laymen.

The committee has made a report as follows:

At a previous meeting of the Advisory Council, the dean appointed a committee to inquire into the advisability and the practicability of having a course in public speaking given at some time during the medical course. After several discussions, it seemed advisable to this committee to take the liberty of widening the scope of its inquiry and to make the recommendation that some course of lectures and instructions be given which would have the objective of encouraging and promoting the better use of the English language among the candidates for the M.D. degree. Such a course should include training in the use of both the written word and the spoken word.

The need for such a course is well voiced in an article in the *Atlantic Monthly* for January, 1937, by Wilson Follett, entitled, "The State of the Language." This author says: "At no time since English became a fully modern language, with dictionaries and codifiable standards of usage, has there been so high a percentage of slovenliness, laxity, and downright anarchy in public use." Further need for such a course in the medical curriculum is demonstrated by the reading of examination papers of the students, and by a casual inspection of the records of patients made by interns in the dispensaries and hospitals. In these records, appalling errors in spelling, punctuation, grammar, and rhetoric are so frequent that the situation has ceased to be humorous and demands remedial measures. Likewise, in the oral recitations, and in the public reading of case histories and of prepared papers, frequently the delivery is so poor in enunciation and expression that the meaning is not conveyed at all, or its apprehension becomes a disagreeable physical effort on the part of the audience.

We feel it advisable to impress upon the students the fact that physicians are not wholly occupied with the diagnosis of diseases and the treatment of patients, but that no small part of their time and efforts is given over to the meetings of various groups and societies wherein are presented the results of their experience and observation, which

are freely discussed and criticised. So it is absolutely necessary for the advancement of the medical sciences as a whole, as well as for the progress of the individual physician, that such reports and discussions be expressed in the best English. It would seem appropriate here to quote from Hill's "Rhetoric," which says: "Rhetoric may be defined as the art of efficient communication by language. It is not one of several arts out of which a choice *may* be made; it is *the* art to the principles of which, consciously or unconsciously, a good writer or speaker *must* conform. It is an art, not a science: for it neither observes, nor discovers, nor classifies; but it shows how to convey from one mind to another the results of such observation, discovery, or classification. Therefore, the correct use of language is an essential tool of science which would be powerless without it."

Also we feel that it is self-evident that the medical profession as a whole has suffered from its lack of interest and its inability to present the simple facts of medical science to the general public, and to justify its traditional attitudes toward many things. It has suffered much, and will doubtlessly suffer more in the near future, because it has been somewhat unvocal and hesitant in presenting its point of view in regard to the vital questions of social security and the socialization of medicine.

Wilson Follett, the author previously quoted, also says: "If we are not to look to public education in language for the training of a generation grounded in civilized awareness of clear, cogent English, there is nowhere at all for us to look. But education can never produce this all-important result without committing itself to two basic necessities, both now very much out of fashion. The first is to concentrate its teaching on simple, precise, concrete facts and principles which can actually be taught to everyone who is teachable, with plenty of old-fashioned practical attention to the blunders which are commonly made. The second, vastly more important, is to demand throughout, the mental attitude which despises all vague half-knowledge as the most insidious and repulsive form of ignorance."

Therefore, the object of such a course as contemplated in this report would not be to encourage the cultivation of style for style's sake, but rather the clarification of one's own thoughts so that they may be expressed with perspicuity. It should train the student to say what he has to say in appropriate language. Then, finally, the direct object of such a course would not be to develop public eloquence or oratory, but rather to enable one, after he has accomplished the task of putting his thoughts on paper in due form, to read them aloud to an audience with intelligible enunciation and intelligent expression.

How these objectives could best be attained would have to be determined by future discussion and planning, and in close co-operation with the faculty at Bloomington. A preliminary conversation with Dr. B. D. Myers revealed that the faculty at Bloomington is cognizant of this need and has some tentative plans in mind. It has been suggested that a course of lectures and practical work in English composition and in reading aloud should form the basis of such a course, but that credit might be withheld until the senior year; that during the intervening years, the student's mind should be kept alert in this field by grading recitations and written work partly for their correctness in the use of English grammar and rhetoric. The students should be made to feel that their use of English is being constantly scrutinized. The faculty of the medical school should be stimulated to this purpose by themselves becoming "English-minded," and inviting free criticism among themselves.

Therefore, this committee recommends that some such course be instituted; and to further this purpose, that a committee confer with a duly appointed committee from the faculty at Bloomington, to explore ways and means, and to recommend a method whereby this may be achieved harmoniously.

QUALIFICATIONS OF A PSYCHIATRIC EXPERT*

FRANK F. HUTCHINS, M.D.
Indianapolis

The qualifications of a psychiatric expert are readily tested and most surely determined by actual trial. There are, however, preliminary factors and certain prerequisite criteria that one might expect would qualify an individual. The psychiatrist of good reputation who has graduated from a recognized medical school, and who has had several years of experience and actual practice, might be expected to be capable of being an expert, especially if he has been a teacher and lecturer on psychiatric subjects. In addition to these qualifications, if he is a member of the local and national orthodox medical societies, the special societies connected with his work, and he is recognized among his fellows, he might reasonably be expected to have the qualifications of an expert. The fact remains, however, that some of the most able psychiatrists, some of the best writers on this subject, are failures as experts before the courts of law. The explanation is simple. The psychiatric expert is not permitted in his own way to give his opinions, make explanations, and tell what he knows, but he must answer the questions as they are put to him, conform to certain rules of law, and comply with certain legal procedures, as the law has its own way, apparently, of obtaining information. The unwary witness may find himself hopelessly entangled by some of these methods,

* Presented before the First Indiana Medicolegal Conference in Indianapolis, December 4, 1936.

and shrewd attorneys themselves become experts in the clever questioning of medical witnesses, said questioning being often calculated to confuse the doctor and lead him unwittingly into the monkey cage.

It is necessary to become more definite and exacting in outlining the qualifications of a psychiatric expert, it being understood, of course, that there would be various grades in the individual attainments. The outlining of such qualifications may be classified into two sections: qualifications as a neuropsychiatrist and qualifications as an expert, there being seven main points in each section, or a total of fourteen points in all. These main points are briefly stated:

1. A qualified neuropsychiatrist should be a man of natural ability, of kindly disposition, with integrity of character and sound common sense.
2. He should have a broad general education, and be well educated and trained in general medicine.
3. He should have an accurate knowledge of the anatomy and physiology of the nervous system, its chemistry and physical science, its actions and reactions.
4. He should be well versed in psychology, the mental mechanisms, emotional reactions, behavior factors, human desires, ambitions, ideals, etc.
5. He should understand the strains and stresses of mankind, the effects of environment and social conditions, the primitive urges, sexual instincts and criminal trends.
6. He should have a wide experience in the affairs of men, their business and economic problems, their social and family life, love affairs, amusements, relaxations and habitual adjustments.
7. He should, above all, be a philosopher, capable of logical thinking, rational reflection, reasonable conclusions and practical integration.

To qualify as an expert:

1. He should have a good reputation and it would be well for him to have no queer ideas or known shortcomings.
2. He should know the legal viewpoint, and its dogmas on responsibility, lucid intervals and mental competency.
3. He should have a reserved and courteous manner, with composure under fire, much patience and self-control.
4. He will need a keen sense of humor.
5. He should have power of concentration, and give close attention, answering questions fairly, and volunteering little unless urged. (It is the lawyer's business to develop the case. Do your explaining and coaching off the witness stand.)
6. He should avoid egotism, over-confidence, and "getting smart," even if he knows the tricks of cross-examiners.
7. He should be very respectful to the judge.

There are many stories about conflicts between lawyers and doctors in the courts of law. Most of these probably place the doctor at a disadvantage, but such is not always the case. There are certain well-known methods of answering questions that the legal profession never seems to profit by, because they continue to be victims of these methods.

Expert testimony is quite a controversial question. It is difficult to understand, however, how you can eliminate such testimony without interfering with an individual's right to protect himself by presenting all the testimony that might have a bearing on his guilt or innocence. The objection to the present system, however, would be largely eliminated by requiring that the written testimony of the expert be submitted to an authorized board of the state medical society for filing and review.

TRANSIENT FAMILIAL PITUITARY DYSFUNCTION

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Bloomington

The two cases here presented are children of sisters who are in every way normal.

CASE REPORTS

Case I. This is a case of periodic hypersensitivity in which it was necessary to combine both history and physical examination and then set about to inquire if the chief complaint had a cause in common with certain clearly demonstrable physical findings which suggested dysfunction of the anterior pituitary.

The interesting clinical feature about this two and one-half year old chap is his monthly asthma-like attacks. The time of onset is between the first and tenth of each month with a duration of twelve hours. Wheeziness, coughing and dyspnea develop with increasing intensity up to a pronounced degree of cyanosis and blanching around the mouth. The rectum and nose itch, but hives are not a feature. The temperature elevates with every attack, once reaching 105 degrees F. Drowsiness gradually overcomes an otherwise alert boy. His sleep during the spell is characterized by quivering and jerking of extremities and body. During that second summer one attack developed into a generalized convulsion. However, a coincidental diarrhea makes conclusions questionable.

His past personal record is that of a normal, healthy infant—a nine months, seven and three-quarters pounds, non-instrumental, breast-fed baby, weaned at six months. He was always a good eater. The first year of life was free from attacks. The thirteenth month saw the first spell of difficult breathing and cyanosis. Each succeeding month, between the first and tenth, attacks occurred until May, 1934. At this time a pediatrician advised the elimination of egg, wheat and tomato from the diet. The mother withdrew eggs. He had no attacks until November, 1934. Although eggs were still withdrawn, monthly recurrence occurred. Nausea, vomiting, pain and constipation

have never been a feature. He has been constantly thirsty. He seemed to be hot all of the time and refused covers at night. Enuresis features attacks.

No particular time of day is associated with onset. Whether sleeping or awake, the mode of onset is the same.

The only treatment has been syrup of ephedrine. This has made the attacks lighter, but it never has entirely aborted them.

Physical examination was interesting: Height thirty-seven inches. Weight thirty-nine and one-quarter pounds. Apparently four to five years of age. Thick subcutaneous adipose layer. Excessive fat around pubic region and mammary glands. Abdomen preponderates short chest. Extremities short, fat. Testicles in low inguinal arrest. Scrotum undeveloped.

COMMENT

The question of "thymic asthma" as raised by Kopp in 1830, opposed by Freidleben in 1858 and confirmed by Grawitz in 1888, must be met and answered. Roentgenographic examination shows a normal thymic shadow without tracheal deviation. However, this gland was not rayed within an attack. Physical examination has never revealed thymic tenderness. Paltauf's theory of 1889 postulating thymic hypertrophy as only one feature of lymphatic diathesis is a confronting interrogation. Concomitant generalized lymphatic overgrowth has not occurred in this case. Lymph nodes and spleen are not palpable, nor is lymphocytosis manifest. The tonsils are not enlarged.

Clinically the boy does not present the usual appearance of status lymphaticus. He has excellent resistance to infections. He is exceedingly active and alert. Although his weight and adipose tissue are excessive, yet he is strong and muscular. His color is that of a normal healthy boy. There is no tendency to seborrhea or eczema. No thyroglossal cyst or mediastinal tumor can be demonstrated. The tracheobronchial lymph nodes are not enlarged.

Attacks are never precipitous. They make gradual onset and progress to a climax. Subsidence is gradual.

The monthly periodicity of attacks seem to favor some internal disturbance. The body features—maldescent of the testicles, large breasts, pubic roll of fat—bring the pituitary into question. Whether the body features pointing an accusing finger at the pituitary and the periodic asthmatic attacks have a causal factor in common will have to be proved. Why was there a cessation of attacks for six months after eggs were withdrawn? Why is each seizure ushered in by a serous discharge of the nose?

TREATMENT

Largely influenced by a desire to bring the testicles from inguinal arrest, antuitrin S guarded by adrenalin in case of hypersensitivity was adopted as a beginning therapeusis. Six subcutaneous injections of ¼ c.c. of antuitrin S produced a well-formed scrotum with both testicles in full descent. However, the presenting complaint, asthmatic attacks, was the trouble from which he sought relief.

As these attacks came on between the first and tenth of each month, antuitrin S was started on the 26th of June, 1935. On the 27th some wheezing started but five minims of adrenalin stopped it. On the 28th another ¼ c.c. of antuitrin S was given. On this date he had a hard, black, constipated stool followed by four loose, black stools. On June 29th he refused breakfast, had projectile vomiting of hot watery consistency, drank more water than usual and had one normal stool. Antuitrin S was withheld.

No further medication was given until July 4th when nasal weeping and pulmonary wheezing began to develop. One-fourth c.c. of antuitrin S cleared the attack immediately. Similar doses were given on July 6th, 8th, and 10th. It was on the last date that descent of the testicles and scrotal development were noted. His mother reports that now he seems cooler to touch and wants covers during sleep. One-fourth c.c. of antuitrin S was given on July 15th. Then this dosage was decided upon for administration on Monday of each week. On August 6th his nose developed a slight serous discharge but there were no other developments. His mother reported that the boy was generally less nervous. Skiagram showed the pituitary area free from abnormalities. All medication was stopped on September 1st. On September 6th he began wheezing and coughing. One-fourth cubic centimeter of antuitrin S brought almost immediate cessation.

Although antuitrin S had never failed to stop an attack, it was replaced by whole antuitrin as antuitrin G was quite as desirable in this case.

His mother, a graduate nurse, kept antuitrin in her medicine chest and awaited an attack. In November, 1935, he developed a temperature of 103. craved water, wheezed very little, and developed a dryness of skin. Exhibiting tenderness in the right renal area and frequency of urination without any demonstrable trouble elsewhere, a diagnosis of pyelitis was made. Urinanalyses were negative. A two days' therapeutic test found his condition as bad as the diagnosis and antuitrin was given.

The whole picture cleared to normalcy in a few hours. He had no attacks until December 29th when wheezing was aborted by antuitrin. All medication and attacks were forgotten until April, 1936, when asthmatic symptoms began their onset. The family in the meantime had moved to another town. Rushing to her medicine chest, the mother found she had no antuitrin. The lone druggist had none. Her son's attack grew worse. With her hypo syringe ready, she drove to the county seat, several miles away, purchased antuitrin and shot him on the spot. The party then got into their car and all symptoms cleared on the return trip. No

medication was given during, and no attacks occurred in May or June, but again in July, 1936, an attack necessitated and yielded to ¼ c.c. antuitrin. The remainder of the summer of 1936, as the summer of 1934, was normal. Not until November 10, 1936, did trouble begin to show itself. One-fourth cubic centimeter of antuitrin failed to give much relief in a few hours. One-half cubic centimeter of antuitrin plus five minims of pituitrin then gave complete relief.

It is surprising to note the rapidity with which this apparently healthy lad can become a feverish, wheezing, miserable patient carrying alarm to all who observe him. It is most gratifying, too, to see a subsidence of all symptoms after antuitrin injection. The next day will find him alert physically and mentally and once more emotionally stable.

How transient is this dysfunction? Is it a gonadotrophic hormonal upset? Why has November been a favorite for attacks to start after comparative freedom for a few months?

Case 2. Primary polydipsia or diabetes insipidus? The presenting complaint of this second case suggested pituitary disturbance but having the mother measure the urinary output for twenty-four hours pointed unmistakably to posterior pituitary dysfunction, yielding to, and finally rebelling against the administration of pituitrin.

Miss I. D., age 12, was seen first June 10, 1935. She had had double pneumonia at 10 weeks. Tonsils and adenoids were removed in her sixth year. No accidents, cerebrospinal diseases or emotional shocks. Mumps, measles, chicken pox and whooping cough constitute the remainder of her childhood disease history. Tuberculin test was positive in 1933 but chest films were negative. During the last three years her nose runs constantly. Colds are continuous with slight aid from serum. She has frequent hives, and occasional frontal headaches. Reading causes dizziness. Excessive thirst. Menarche at 10 followed by phenomenal growth.

Her complaints as given were: "Wants to go to Girl Scout Camp but can't because wets bed." Nights—copious enuresis every two hours or oftener. Retires at 8:30 and bed is wet by 10:00. This condition has been present since birth. The bladder empties too often during the day—every half to one and one-half hours. Worse last three or four months. As soon as class is over at school, she goes to drinking fountain and then to void. She cannot sit through a show and get home safely without soiling clothing. She is miserable if she holds the bladder full. There is no involuntary diurnal micturition. Thirsty all of time; often thirst is insatiate. Urine never was measured. All specimens of urine examined have showed nothing. Four months ago she went seven days without enuresis. She is cold all of the time—sleeps under comforts on hottest nights. Weight normal until puberty, then large gains. Metallic taste in mouth.

Various remedies such as citrocarbonate and urinary antiseptics have been tried without noticeable effect. The condition has been diagnosed and treated as enuresis of habit or enuresis with defect in the genito-urinary tract.

Physical examination revealed a female apparently 18; well formed bust; weight, 125; height 5 feet, 5 inches; dry skin; right pupil slightly larger than left; thyroid, barely palpable.

Urinalysis showed specific gravity 1014, neutral and no albumen, sugar, casts, pus or blood.

Blood picture—normal. Serology—negative.

Skiagram of sella turcica and pituitary region negative.

A diagnosis of pituitary dysfunction was tentatively made with no effort to differentiate between lobes. The mother was asked to measure the urine for twenty-four hours. She awakened the patient every one to two hours and had her void. Enuresis occurred once and that was lost. Twenty-one hours, not including the single enuresis, yielded twelve and five-sixths pints. Obstetrical pituitrin, one cubic centimeter, was given on the morning of June 22nd and again at bedtime. Enuresis occurred. On June 23rd, one cubic centimeter of surgical pituitrin was given in the morning, afternoon and evening without enuresis. On June 24th, one c.c. of obstetrical pituitrin—no enuresis. On June 25th, two cubic centimeters of obstetrical pituitrin prevented enuresis but the measured output was twelve pints. June 26th and 27th one c.c. of obstetrical pituitrin was given at bedtime—enuresis occurred both nights with respective outputs of twelve and fifteen pints. June 28th one c.c. of obstetrical pituitrin with no enuresis.

Surgical pituitrin was then adopted. From June 29th to July 5th, inclusive, one c.c. of surgical pituitrin was given at bedtime with no enuresis and outputs between five and fourteen pints. On July 6th an attempt was made to reduce pituitrin to ½ c.c. at bedtime and shift to emplets of pituitary gland. One emplet t.i.d. plus pituitrin gave enuresis and nine pints measured output. Next day under the same therapy there was no enuresis with seven and one-half pints of urine. July 8th and 9th pituitrin was discontinued and emplets given—t.i.d. and three t.i.d. respectively. The results were two bed accidents each night and twelve and eleven pints output.

On July 11th the girl was sent to the University hospital at the Indiana Medical Center. Here her urinary output varied between 1000 c.c. to 5025 c.c. under pituitrin or pitressin, neither of which seemed to have any advantage over the other. Specific gravities varied between 1,008 to 1,017. She was discharged on August 7, 1935, with a diagnosis of diabetes insipidus.

On August 8th, she weighed 131 pounds. She had had no enuresis since August 4th, on one-half c.c. surgical pituitrin q.i.d. She was continued on this dosage. On August 18th she presented a most extraordinary greenish hue of skin. She was

pepless and losing appetite. After each injection of pituitrin, nausea came on within twenty minutes. Following the suggestion of a fellow physician, the pituitrin dosage was reduced to one-fourth c.c. morning and afternoon, and one-half c.c. at bedtime, each injection being accompanied by one-half c.c. of adrephen to lengthen the time of absorption. For sixteen days she experienced a return of normal color and appetite, no enuresis or great thirst and no nausea.

On September 4th she again developed the greenish hue, became irritable and nauseated after each injection. Nocturia varied between two to four or enuresis preserved sleep. Variations of pituitrin and adrenalin were tried with no success until on September 12th all medication was discontinued. Diurnal frequency up to eleven voidings and occasional single nocturia without enuresis followed but gradually gave way to no nocturia or enuresis and normal thirst, water intake and diurnal output. This normal picture without disturbance has now held sway nine months. In the meantime her weight has reduced to 118 and remains steady. She has become more active physically and mentally. She has become active in extracurricular activities, a favorite of her classmates, and eager to keep her grades within a commendable range.

Prior to pituitary administration her intermenstrual period was 21 days. During treatment this was lengthened to 34 days. Since discontinuation of treatment a 28-day regularity has established itself.

COMMENT

Students of diabetes insipidus believe that children may show this upset temporarily with disappearance of all symptoms after puberty. Whether this patient recovered because of medication or in spite of it is questionable. She did respond to therapy but the troublesome features which developed to cause all treatment to be abandoned were interpreted to be a reaction of the body against pituitrin.

How is the relatively high specific gravity of the urine to be interpreted? True diabetes insipidus carries a low specific gravity. This patient could vary between 1008 and 1017. Is there a difference between primary polydipsia with secondary polyuria, and an excessive secretion of urine with impoverishment of body fluids and secondary polydipsia? Does this relatively high specific gravity differentiate between a temporary and permanent diabetes insipidus?

A multiplicity of events occurred in this patient as a result of pituitary malfunction. The first result noticeable was inability to go for long without becoming distressingly thirsty. Enuresis was considered a continuation of infantile sphincteric behavior. Not until this patient desired to take her place among other girls of her age did enuresis assume significance. Polydipsia and polyuria with negative urines, diagnosed clinically as diabetes insipidus and yielding to pituitrin, find the majority of students favoring malfunction of posterior pituitary. The second set of results was the early onset of menstrual bleeding at 10 with enhancement of sexual maturity and phenomenal growth—responsibility for which traverses anteriorly to witness malfunction of the anterior pituitary. A disturbance of fat and carbohydrate metabolism does not seem to have entered the picture, although her descent of weight from 134 to 118 under pituitary therapy is unexplained.

No effort was made to check the effects on mean arterial pressure or respiration. The oxytocic effects were noticeable during menstruation and twice between catamenias.

SUMMARY

Two cases are presented without effort to contribute to the advancement of hormonal therapy. Both are cases of demonstrable pituitary, gonadal hook-up. Both present features of anterior and posterior pituitary disturbance. One feature shared by both is a serous discharge of the nose. Does this represent a partial upset in water metabolism? Is the asthma-like attack with wheezing and cyanosis in Case I merely an advanced stage of disturbed water metabolism with the mucosa of the entire respiratory tree sharing edema? Why would antuitrin cause rapid disappearance? The respiratory symptoms and bodily features pointing to anterior pituitary disturbance seem to have a common cause as proved by responses of both to antuitrin therapy. Finally, is there ever a functional disturbance which can be assigned exclusively to either lobe of the pituitary?

704 E. FIRST STREET.

WARNING

Physicians in Indiana are receiving postal cards offering work that will pay $40 per week or more. Investigation shows that the offers are made by a chain-store optometry company, and the positions offered are not acceptable to reputable physicians.

RADIATION TREATMENT OF UTERINE HEMORRHAGE AT OR NEAR THE MENOPAUSE

JAMES N. COLLINS, M.D.
Indianapolis

The discovery of x-ray in 1895, with its immediate recognition as a diagnostic aid in medicine, was soon followed by a realization of its therapeutic properties, although it is only in recent years that its full usefulness in this field has been known.

Since early during the year of 1896, when this ray was first used in the treatment of pathological conditions, almost every known disease has had opportunities to feel its effects. We have learned that it is not a panacea and, by trial and error, have found out what and what not to attempt to treat.

The roentgen ray therapist is likely to be called upon to treat many hopeless conditions, conditions where other methods have failed or in which the pathology has been discovered too late for other procedure. While it is his duty to do what is possible in the way of alleviating symptoms and obtaining a rare cure in these cases, credit should be given to the type of material in speaking of results. The unobserving are likely to have obtained an incorrect idea of its possibilities.

In many disease conditions, radiation therapy is definitely indicated and none is more important than the unexplained uterine bleeding at or near the menopause. Basing our opinion on the experience of others as well as our own, we believe this to be the method of choice in a large percentage of patients suffering from this type of disease.

The radiologists of Indianapolis are fortunate in having the close cooperation and the confidence of the whole profession; consequently we are often called into consultation by surgeons and the majority of these consultations are requested by gynecologists. This, we believe, speaks well for the treatment.

Radiation before the menopause age is not a problem for the radiologist except when all conservative methods, including curettement, have failed. The exception is, of course, the patient who has her family and in whom, for health's sake, the permanent cessation of the disturbed menses is necessary. We have not hesitated in accepting properly selected cases of this type and have had no reason to change our opinion. It should be mentioned in passing that when the young do have to be radiated, only small doses are recommended, that is, sufficient to stop the flow for a few months. This has been done successfully in the small number of cases seen by us. The patient must always be warned of a small risk of permanent amenorrhea and sterility.

As mentioned above, this study is mainly concerned with menorrhagia, metrorrhagia or dysmenorrhea at or near the menopause, and it is these cases we shall briefly discuss.

HISTORY

A history of profuse hemorrhage in a woman who may or may not have been previously regular is obtained. Several periods may be missed only to be followed by a severe one. This may last for years and if sufficient blood is lost anemia will result. An increase in blood during the climacteric is not to be regarded as physiologic, a misconception which often leads to grave errors. The symptoms are so well known to any practitioner that detailed discussion is unnecessary. A careful history is essential in the differential diagnosis of these cases.

EXAMINATION

Given a woman with uterine bleeding, a pelvic examination is second in importance only to the history. It is our duty to determine the cause. We recently saw a woman, aged 50 years, the mother of four children, who had consulted her physician a year before for unexplained uterine hemorrhage. At that time her health was good and his advice to her was that she was beginning her menopause. An examination was not made. After a year of such advice a second physician was consulted who immediately examined the pelvis and found a large carcinoma of the cervix extending well up on the vaginal walls. The year that had elapsed had lost for this patient her only chance for a cure by any method and through no fault of her own. It is also important to rule out certain types of pelvic infection and large fibroids if radiation is to be given. Fibroids less than the size of a three months' pregnancy will almost always disappear with radiation and should not be considered a contraindication to this form of therapy. In many of these cases the pathological findings are "conspicuous by their absence" and the pelvic examination is entirely negative. Fibroids are quite commonly found though they may have nothing to do with the symptoms. The uterus is likely to be enlarged; however, this is not a constant finding.

PATHOLOGY

In a series of 200 cases studied by Shaw, in which the clinical picture was studied and in many of the group correlated with the operative and pathological findings, the following classifications were made:

In 35 cases no definite explanation could be found.

In 13 cases the symptoms could be explained by a real endometritis.

The remaining 152 were divided into four groups as follows:

(1) This group included 53 patients, ages from puberty to fifty-five with majority above forty; the chief complaint was a continuous flow lasting from three weeks to months. Forty-nine per cent had periods of amenorrhea preceding the hemorrhage; 26% had been normal. Pathological study

of removed uteri showed 50% enlarged due to myohyperplasia; 50% were of normal size. All cases had greatly thickened endometrium with surface epithelium disintegration and the glands contained cysts, were hypertrophied and increased in number. The appearance was that of an intermenstrual rather than a premenstrual congestion. One or more follicular cysts were found in the ovaries and there was ovarian atrophy.

(2) Seventy-two cases (36%), aged between 40 and 50 years, suffered prolonged menstruation and increased blood loss. The uteri were smoothly enlarged three or four times, the endometrium was of normal thickness or less, but the middle zone was hyperemic, and showed edema. The ovaries were shrunken and contained cystic hemorrhagic follicles. The findings suggest that the ovaries may have been stimulated to overaction.

(3) Of 16 cases, 26 to 51 years, only two were under 40. The length of cycle was increased and there was profuse bleeding. The endometrium showed edema and hyperemia with often hyperplasia.

(4) This group included 11 cases, mostly under 40 years, with moderately severe vaginal hemorrhages occurring between normal menstrual periods. The uteri showed no abnormality but there was some edema with extreme hyperemia without hyperplasia of the endometrium. There was hyperplasia and hypertrophy of the ovaries, also many follicular cysts and abnormally developed corpora lutea.

The conclusions from Shaw's[1] work seem to show that in bleeding without demonstrable pathology the endocrines play a large part with the ovary playing an important role.

CHOICE OF TREATMENT

Assuming that, after careful study, radiation is the treatment of choice, there are two methods between which the radiologist must choose, namely x-ray and radium. Each has advantages in certain types of cases; however, in the great majority, they are equally effective. If this be true, the safety of the patient and the economic problem should determine our choice.

It has long been our custom to accept suitable patients for x-ray radiation, depending upon only the clinical examination for diagnosis. In doing this we realize that we are open to criticism for proceeding without the pathological study. There seems to be no good reason in a woman of 40 years for not giving a full erythema dose just as would be done in malignancy. Mistakes in diagnosis will conceivably be made, and malignancy overlooked, but since preoperative radiation is now an accepted treatment in pelvic cancer, little is lost. All patients should be carefully followed and if results are not soon forthcoming, surgery or radium should be used.

In borderline cases, curettage followed by radium is the better procedure. If the pathologist reports a questionable malignancy, the only difference in treatment is that it is continued longer.

Admitting, in the average case, that surgery (not simple curettage), radium or x-ray radiation will yield the same general results, we are strongly inclined to the latter for the reasons that:

(1) In x-ray radiation the daily activities of the patient will usually not be greatly curtailed, many being able to continue their work;

(2) While it is only fair to both radiologist and surgeon that fees have an equal basis, there is still a large hospital and nursing bill to consider, as well as the loss of time;

(3) With x-ray radiation there is practically no danger to the patient. It should be remembered that the use of radium means surgery and while the better surgeon of today expects almost a 100% good prognosis, there is still the unexpected over which he has no control.

AFTER CARE

According to Graves,[2] many women pass through the menopause with little or no trouble, and this may be considered the normal. There are, however, certain constitutional and psychic changes which the majority experience. These are too well known to need discussion. There is much that can be done to relieve these symptoms in the way of organotherapy and still more by the sympathetic physician and an understanding family.

Unfortunately, those having an artificial menopause, be it from surgery or from radiation, do not escape these unpleasant symptoms. Most writers believe this type of menopause to be the least severe; however, this has not been proved. The least we can say is that the artificial menopause is of shorter duration.

The radiologist, like the surgeon, dislikes to accept the very nervous type of patient who is likely to suffer mental symptoms during any type of menopause. Neither surgery nor radiation will increase these symptoms but we do not care for the criticism that comes with this kind of case. We personally have felt the rebukes of two patients whose families were told by an unscrupulous or ignorant physician that the x-ray was the cause of all the symptoms.

Many radiation cases suffer no loss of time and most do not have unusual symptoms. We believe that with the proper after care there never will be unpleasant results.

In conclusion, we do not wish to leave the impression that radiation is the only method or in many cases the desirable one, of handling these cases. However, in the properly selected case, x-ray radiation is the simplest, most economical and safest procedure in the treatment of uncontrollable bleeding at the menopause.

712 HUME MANSUR BLDG.

[1] Shaw, Wilfred: Irregular Uterine Hemorrhage. *J. Obstet. & Gynecology, Brit. Emp.*, 1919, 36, 1-69.

[2] Graves, Wm. P.: Gynecology. W. B. Saunders & Co., Philadelphia, 1919, p. 22.

MANAGEMENT OF BRIGHT'S DISEASE*

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A discussion of the numerous and confusing classifications of nephritis is undesirable. However, definitions of the three major groups into which Bright's disease is divided are helpful:

(1) Hemorraghic or glomerular nephritis is a generalized anaphylactic inflammatory disease of the capillaries especially involving those of the kidneys. If cure is not effected in the early stages there eventually follows hypertension, renal failure, and death in uremia in about two-thirds of the cases. The remainder die of such causes as heart failure, cerebral hemorrhage, etc., before renal failure has become complete.

(2) Nephrosis, or better the nephrosis syndrome, is a generalized metabolic disease with associated non-vascular degeneration of the kidneys. Recovery may be complete or incomplete, leaving the patient with persistent albuminuria. If death occurs in the nephrotic stage, it is usually due to intercurrent infection, especially pneumonia or peritonitis. Pure nephrosis is rare; the syndrome is usually a stage in glomerular nephritis.

(3) The scleroses which include vascular or primary hypertension and nephrosclerosis (vascular or interstitial nephritis) are characterized by a generalized sclerosis of the medium and smaller arteries. The kidneys are involved to a greater or lesser degree in the progressive ischemia of the various organs. Death from uremia occurs in only about ten per cent of the patients. Heart failure and cerebral vascular lesions are common.

These three types of disease tend to overlap and are, therefore, frequently "mixed." Furthermore, each of these diseases is a generalized disorder in which the kidneys merely play a part, sometimes major, sometimes minor.

ACUTE GLOMERULAR NEPHRITIS

Let us consider cases illustrative of these three types of nephritis. Suppose your patient is a young adult who had been well until a sore throat developed two weeks ago. Three days ago his shoes began to feel tight and members of his family noticed puffiness about his eyes. He now recalls that yesterday his urine was scanty and dark in color. Examination shows, in addition to the edema, pallor of the skin and a blood pressure of 180/100. The urinary examination shows a high specific gravity, a large amount of albumin, red cells in abundance and cellular and granular casts. In such a case, blood chemistry studies are unnecessary unless one suspects chronic nephritis with an acute exacerbation, or unless a severe and prolonged oliguria becomes a disturbing factor.

How are you going to treat such a patient with acute nephritis? He should remain in bed at complete rest so long as there are indications of gradual clearing of the activity of the renal process. Blood in the urinary sediment is the best index of this but the trend of the degree of albuminuria over a period of time may be another helpful sign. Patients have been observed to recover completely from acute glomerular nephritis after albuminuria and hematuria had persisted as long as two years.[1] If the patient is so fortunate as to have the urine become clear in four to six weeks there will be no great difficulty. If the situation is less fortunate then the patient should be kept in bed until the urinary sediments are practically free of red blood cells for at least two weeks; then he may be allowed to get up gradually. An increase in the amount of albumin or a return of hematuria means that the patient should return to bed. If, after weeks in bed, the degree of albuminuria or hematuria has become constant without any tendency to become intermittent or to diminish, one may suspect that this attack is merely an exacerbation of a chronic nephritis or that the process, if acute, is progressing into the chronic stage. In considering the individual case one can not be certain that the process has become chronic until the urinary abnormalities have persisted for a year or more after the onset of the acute nephritis. The trend of sedimentation rates and urea clearance tests determined over a period of time may be helpful in predicting healing of the renal process.

In feeding the patient with acute nephritis there are two cardinal dietetic principles:

(1) Limitation of fluids.

(2) The prevention of prolonged underfeeding.

Early, while edema is present, fluids are limited to 800 c.c. in 24 hours. With the cessation of diuresis this amount may be increased first to 1,000 c.c., and then carefully to 1,500 c.c. Forcing of fluids, except in very special cases, is no longer good practice. This results in the rupture of additional glomerular capillaries and, in the edema stage, merely adds to the edema. During the first week a helpful procedure is to give 800 c.c. of fruit juice with about 200 grams of glucose. If there is no nausea the carbohydrates and other foods are increased so that within two weeks the patient is receiving a mixed diet limited only in fluids and salt. It is unnecessary in the average case to determine accurately the protein and salt intake. The amount of salt after the first few days should be the 3 grams contained in the food as it comes to the table with small amounts added to unpalatable items. The patient must as soon as convenient receive approximately one gram of protein per kilo of body weight. We must remember that if less is given for a long period the deficit in protein is replaced from the patient's own tissues. Also a protein ration of less than 60 grams per day for an adult is inadequate because of its deficiency in calcium, iron, and phosphorus.

* Read before the Eleventh District Medical Society at Marion, May 20, 1936.

[1] Richter, A. B.: Prognosis in Acute Glomerular Nephritis, 31, 1936.

In acute nephritis there is practically no indication for drug medication. The bowels should, of course, be kept active to a reasonable degree with salines, but purging is not to be employed. Diuretics are absolutely contraindicated; they are ineffective and often harmful.

Sweating is now considered inadvisable. This applies to all forms of nephritis. Exposure to cold and wet should be avoided.

Occasionally serious anuria develops in the patient with acute nephritis. One should then ignore the question of edema and give plenty of fluids by mouth or parenterally. Fortunately in most cases diuresis begins about the time more drastic procedures are considered. Decapsulation of the kidneys has not given satisfactory results.

It is essential that we protect the patient with acute nephritis against intercurrent infections. When should diseased tonsils and teeth be removed? Unless an urgent situation arises it is best to leave the more chronic infections until convalescence from the nephritis is well established. The tonsils should be removed in every case that has a history of sore throats or other evidence of diseased tonsils.

It is important to know that a number of patients with acute and chronic nephritis have convulsive seizures, psychotic states, or extremely severe headaches which are the result of so-called hypertensive encephalopathy. Such a condition calls for urgent treatment. Morphine is usually given; magnesium sulphate intravenously or intramuscularly occasionally produces good results. Prompt venesection of 500 c.c. is of great value. Because of the increased intracranial pressure, lumbar puncture is another helpful therapeutic measure. The fluid should be removed slowly and not below 200 m.m. of water pressure.

CHRONIC NEPHRITIS AND UREMIA

Let us suppose that in spite of treatment, a patient progresses into chronic nephritis and progressive renal insufficiency. For a varying time the only abnormalities found on examination of this patient may be those confined to the urine. Later hypertension may develop and exist for a considerable time, even with normal renal function tests.

The treatment during this period up to the terminal stage is essentially that of the patient with primary hypertension. In the terminal stage the patient complains of great fatigue, dyspnea, occasional nausea and vomiting, headache, blurring of vision, etc. Examination shows a definite pallor, ammoniacal breath, a retinitis, a somewhat enlarged and rapid heart, rales at the base of each lung, slight edema of the shins, and a severe hypertension. There are two problems. At this stage the edema is cardiac in origin and the need for bed rest and digitalis is evident. The other problem centers around the renal insufficiency as indicated by the anemia and the ammoniacal breath. Blood chemistry studies are unnecessary. A Karell or modified Karell diet for about three days may be helpful for both the heart and kidneys. Then, if not vomiting, the patient should be placed on a high caloric diet. The protein may be limited for a time to 40 grams. The salt should be restricted to that already in the food when it comes to the table with an additional 2 or 3 grams to offset the loss of base through vomiting or by combination with toxic acid bodies. This low level of protein is unsafe and should be continued only until the nitrogen retention has been reduced as low as possible. Then the protein ration should be increased gradually up to 60 grams or to the optimum of one gram per kilo.

How much fluid should be given to such a patient? If three or four liters per day could be given, the retained nitrogen bodies might be diluted to a level permitting increased excretion. However, forcing fluids introduces the risk of upsetting the enfeebled circulation, often causing an attack of pulmonary edema. It is safest to limit the fluid intake to about 2,500 c.c. and watch the heart closely.

What would you do for the patient who is vomiting frequently and excreting little urine? The most important therapy is the giving of about 2 liters of saline and glucose parenterally in 24 hours. The best rule with regard to food in this case is to remove all restrictions and permit the patient to have small amounts of any food that he desires. Often a patient who craves something apparently absurd may retain it when he will not tolerate simple and more natural foods.

Drugs in the late stages of nephritis are, as in the early stages, used mainly for the relief of symptoms. When edema is present it is cardiac in origin and calls for digitalis. Diuretics of all kinds are contraindicated. Iron and liver do not improve the anemia. Blood transfusions are at best of temporary benefit. Various sedatives are used for restlessness, insomnia, headache, etc. Dilute hydrochloric acid for a day or two may relieve the vomiting. Magnesium sulphate and calcium gluconate parenterally are used for muscular twitchings, and morphine or ether may be used for the convulsions. It is the duty of the physician to prevent convulsions. Sponging the skin with weak acetic acid is the best remedy for the intractable itching. Venesection and plasmophoresis are without benefit. Catharsis, if not so vigorous as to exhaust the patient, is of some value in ridding the bowel of toxic phenols, etc. Sweating the patient is both futile and dangerous. Acute pulmonary edema may follow such treatment.

It is necessary to emphasize that a patient in the late stage of glomerular nephritis may be at the point of death in uremia and yet recover to live for many months. Such an episode may recur several times and is more common in the uremic stages of glomerular nephritis than in vascular nephritis of primary hypertension.

NEPHROSIS SYNDROME

Suppose another young adult comes to you with a complaint of swelling of the face and feet. He has not been well for a few months. On examination there is edema of the face and legs, and small amounts of fluid are present in the abdominal and pleural cavities. The urine shows a high specific gravity, a large amount of albumin and many casts. Readily noted are certain peculiarities distinguishing this case from acute hemorrhagic nephritis. In the first place a history of a provocative infection is lacking. The onset has been insidious. There has been no gross hematuria. The blood pressure is normal. You will recall that in hemorrhagic nephritis the urinary sediment shows numerous red and white blood cells. In this nephrotic patient there are very few red cells in the sediment although casts and fat globules may be abundant. The conspicuous features are the edema and the excessive albuminuria. Pure cases of nephrosis occur but are extremely rare; a combination of glomerular nephritis and nephrosis is more common.

Confirmation of the diagnosis will soon be evident clinically by the fact that the edema becomes more and more prominent and fails to disappear promptly as in hemorrhagic nephritis. Likewise the albuminuria does not decrease. These three features, the persistent edema, the oliguria, and the excessive albuminuria are the chief clinical features of the nephrosis syndrome. If laboratory studies are available there will be little change in the non-protein elements. The serum-protein is low, the globulin relatively high; the cholesterol is high and the calcium decreased.

How should such a patient be managed? He should be kept in bed until the edema is under control, even for many months. The most important thing is not to underfeed. An attempt is made to replace the protein already lost in the urine by giving the patient 120 grams or more of protein per day. After a few weeks the protein intake may be dropped to one gram per kilo plus the average amount of albumin lost in the urine each twenty-four hours. The salt is limited to that present in the food when it comes to the table with small amounts added to unpalatable items.

Fluids are limited to about a liter until the edema is gone. If oliguria remains severe, Volhard's plan of limiting the intake on a given day to the level of the output of the previous day may be beneficial.

It might at first seem possible by the above procedures to cause a replacement of the blood proteins, an increase in the urine, and a disappearance of the edema. Unfortunately, this direct attack on the problem is rarely successful, perhaps due to the fact that we are dealing with a perverted protein metabolism. The protein in the urine is not serum protein as in hemorrhagic nephritis and it is highly probable that the blood protein in such a patient is also different from normal serum protein.[2] [3] Therefore, other methods must be employed.

There is need for the utmost conservatism in the interpretation of the results of any form of therapy in nephrosis. Spontaneous diuresis is the rule in this disease and the correct association of cause and effect in the use of some therapeutic measure becomes difficult.

Various diuretics are used. Any one may be effective in a given patient or all of them may fail. Urea in doses of 60 to 100 grams per day is perhaps the best diuretic given by mouth. However, one must be careful of such large doses in patients with a combination of glomerular nephritis and nephrosis; the blood urea nitrogen may be increased to a dangerous level. The xanthine group of diuretics may be effective when given to the point of nausea. Potassium chloride and calcium may be effective in large doses. Ammonium chloride may cause diuresis when used alone, but it is usually combined with the mercurials, especially salyrgan given parenterally or as a rectal suppository. Other procedures which may rarely be worth while are: an "acid ash diet," a "high potassium diet," and the high alkali regime recommended by Osman and Bennett. Thyroid medication, even in very large doses, has not been successful. For a time apparently good results were obtained in the treatment of the edema of nephrosis by the intravenous administration of acacia. More recent work[4] has shown that such a procedure is not only futile but harmful.

The edema may be so severe that the pleural and abdominal cavities as well as the subcutaneous tissues may have to be drained.

Protection of these patients against infections is very important since the most common cause of death is not renal insufficiency but intercurrent infections especially pneumonia, peritonitis, and erysipelas.

Some of these patients with the nephrosis syndrome respond to the procedures here listed but more do not. Although the effects of therapy are often discouraging, few of the patients die. Most of them, after months of ineffectual treatment, lose their edema probably by spontaneous diuresis. The result may be complete clinical recovery, recurrence of the edema, progression into a typical chronic glomerular nephritis, or merely a persistent albuminuria for years with normal renal function tests.

VASCULAR NEPHRITIS

In a consideration of this third type of Bright's disease, a discussion of primary or essential hypertension would be appropriate. This disease was

[2] O'Hare, J. P.: Management of Bright's Disease and Hypertension. *New Eng. Jour. Med.* 212: 1197 (June 27), 1935.

[3] McCann, W. S.: Bright's Disease: A Review of Recent Literature. *Arch. Int. Med.* 57:630 (March), 1936.

[4] Dick, M. W., Warmeg, E., and Andersch, M.: Acacia in the Treatment of Nephrosis. *J. A. M. A.* 105:654 (August 31), 1935.

(Continued on page 112)

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EDITORIALS

CANCER OF THE CORPUS UTERI

Cancer of the uterus is not a good terminology. It needs to be differentiated as cancer of the cervix uteri and cancer of the corpus uteri. Although associated with the same organ, the two conditions differ as to the average age at which they develop, the symptomatology, the histological nature, the prognosis, and the method of treatment.

In studying the large groups of reported cases of cancer of the body of the uterus, many factors stand out. The average age of the patient is higher for the corpus than for the cervical cancer; about two-thirds are of postmenopausal age. The most prominent symptom is metrorrhagia and vaginal discharge. The development of bleeding in the woman who has definitely completed her menopause and where the gross pelvic findings are negative will mean cancer more likely than any other pathology. Myomas are associated with this condition in 20 to 35 per cent of the cases. Childbearing does not predispose to fundal cancer.

For the diagnosis of cancer of the uterine body, diagnostic curettage with examination of the material obtained may be relied upon for all practical purposes. Because of the association of this condition with other uterine pathology, all uteri removed at operations should be opened and the cavity examined before the operation is completed. The presence of cancer would perhaps often change the operative procedure. It is advised that the pathologist determine the histological type of the cancer cell. There are two main divisions. Discovered cases fall about equally into the two groups. The one of lesser importance is the adenoma malignum Grade I and II variety. The abnormal cells are confined to the interior of the uterus and tend to spread as papillary glandular structures over the surface of the uterine cavity rather than into the lymph or blood channels. These cells, however, reveal definite malignant characteristics. The second group includes all the definitely lawlessly-growing cell masses which tend to involve the myometrium and spread by the lymph and blood to other pelvic organs and other parts of the body. They are designated as the adenocarcinoma A and B, diffuse anaplastic carcinoma and the adeno-acanthoma.

For excellent discussions of the treatment of cancer of the corpus uteri, the recent papers by Healy,[1] Murphy[2] and Norris and Dunne[3] should be consulted.

It is essential to know the type of cancer cell with which one is dealing. Hysterectomy alone is applicable only to the group one cases and will successfully cure most of them if the cancer is confined to the uterus. It should be a complete hysterectomy including the tubes and ovaries. The operative mortality should be less than 5 per cent. For the patient who is a poor surgical risk, radiation therapy alone has proved satisfactory. It is advised after any hysterectomy for the adenoma malignum type that x-ray treatments be given.

For the treatment of the second group of cases, and uterine body cancer involving other pelvic organs, less than 50 per cent cures can be expected. Where hysterectomy can be done, Healy reports that in his series when radiation therapy preceded operation, 60 per cent survived the five-year period; when the operation preceded radiation, only 33.3 per cent survived five years and where only hysterectomy was done, poor results could be expected. The value of radiation alone for inoperable cases is stressed and a five-year salvage of 43.8 per cent of 89 patients treated by radiation alone is reported by Norris and Dunne.

Sufficient experience has not been had with radiation therapy alone for the group two cases, but with improved techniques it is possible that best results for the advanced cases will be had by this method alone. At the present time the method of choice is considered to be radium implantation into the uterus at the time of the diagnostic curettage for a dosage of at least 3,000 to 4,000 milligram or millicurie hours. Within a week the patient should be started on a series of x-ray treatments of fractionated, daily doses with the 200 KV machine. Hysterectomy if possible or planned is performed six to eight weeks after the intrauterine radium treatment.

[1] Healy, William P.: Irradiation Therapy in Cancer of the Corpus Uteri. *Am. J. Surg.*, 27:3 (March), 1935.

[2] Murphy, Walter Timothy: Uterine Corpus Cancer. *Radiology*, 26:2 (February), 1936.

[3] Norris, Charles C., and Dunne, F. Sidney: Carcinoma of the Body of the Uterus. A review of 279 Cases with Five-Year End-Results in 211 Cases. *Am. J. Obs. & Gyn.*, 32:6 (Dec.), 1936.

THE FIRST INDIANA MEDICO-LEGAL CONFERENCE

A peaceful meeting between doctors and lawyers is an unique event. Such was the recent Indiana Medico-Legal Conference held in the Indiana University School of Medicine, December 4, 1936.

The purpose of the conference was "The application of expert medical knowledge and of scientific evidence to the needs of law and justice." It was attended by prominent lawyers, physicians and police officers from all parts of the state. The morning and afternoon sessions were devoted to conferences on medicolegal autopsies, chemical tests for intoxication, and medicolegal testimony as to sanity. The judges and other attorneys present took an active part in the discussion, which was very outspoken in regard to some of the failings of both professions. The evening session was held at the Claypool Hotel and was addressed by the Governor, Paul V. McNutt, Dr. C. W. Muehlberger, of the Northwestern University Crime Detection Laboratory, by Mr. E. P. Coffey, Chief of the Technical Laboratory, Federal Bureau of Investigation, Washington, D. C., and by Mr. Joseph J. Daniels, of the Indianapolis Bar. At this session, a committee of laymen and lawyers was appointed to draft and submit to the present legislature laws designed to correct outstanding abuses of legal procedure, which enable the criminal to escape justice.

A special feature of the conference was an exhibit illustrating laboratory methods used in fighting crime—finger prints, bullet identification, handwriting, studies of blood stains, lie-detectors, etc.

The groups sponsoring the conference were the Indiana Committee, the Indiana State Police, and the Indiana University Institute of Criminal Law and Criminology. The necessity of united action against the modern criminal has drawn all these groups together. The Indiana Committee consists of representative citizens from all parts of Indiana. It was organized before the 1935 session of the legislature. Its purpose is to promote the passage of laws designed to facilitate speedy conviction of criminals, and to work for all possible improvements in the administration of justice. The Indiana University Institute of Criminal Law and Criminology is part of the Indiana University Law School. Its purpose is to study all aspects and causes of crime, and to seek remedies therefor. One of its activities is the training of state police officers, which training is now required of all candidates seeking admission to the state police force.

The medical school is interested in the application of chemistry, toxicology, pathology, clinical microscopy, etc., to the solution of problems involved in the detection and conviction of criminals. This has come to be a special branch of medicine, for the development of which special laboratories have already been established at Harvard, Northwestern University and at one or two other institutions. It is a specialty which in the future will afford careers to many physicians.

The round-table discussions were of especial interest to physicians. In the discussion of autopsies, it was emphasized that they should be done by men qualified by training and experience and who have adequate laboratory facilities. Frequently a satisfactory autopsy requires that many hours be spent in the examination of the body and subsequent laboratory study. Too often the autopsy is so poorly done that the findings are useless for medicolegal purposes, and the body is so badly mutilated that even a competent pathologist cannot obtain desirable evidence from it. Recent tests for paternity, the typing of blood stains, the identification of decomposed or partially burned bodies, the recognition of poisoning, and the legal proof of intoxication were discussed. A demonstration of his method for determining the depth of alcoholic intoxication by analysis of the breath was given by Professor R. N. Harger. He proved that the method is accurate enough to show that the innocent drinker—one who has imbibed no more than a single bottle of beer—is not intoxicated.

The suggestion was made in the conference on the abuse of insanity as an excuse for crime that the medicolegal testimony of doctors be submitted to their county medical societies for review. Former prosecutor William H. Remy stated that this abuse is less common than formerly in Indiana.

The chief immediate good accomplished by the conference was perhaps the establishment of a better understanding between doctors and lawyers in regard to their mutual relations to many social problems. It showed that society must rely upon scientific medicine to combat the scientific methods of the modern gangster.

NON-BEDSIDE NURSING

It is a far cry from the days of Florence Nightingale, the founder of the nursing profession, to the present time when that profession has come to be so popular as to be exceedingly over-crowded. Also it is a far cry from the time when nursing was wholly confined to the sick room to the present day when nurses fill about every niche in human life. We have the city nurse, the Red Cross nurse, the insurance company nurse, the welfare nurse, the visiting nurse, the industrial nurse, and what not. They all have their respective places, but there are times when we wish they would confine their activities to said places.

The modern nurse's training school is an educational institution of no little consequence. For the most part, such schools are under the supervision of the state, and the curricula are more or less standardized. The schools offer courses of instruction which should lead to a finished product. In

the past few years, we have noted a growing tendency on the part of a large majority of students in these schools to point their courses to other than bed-side nursing as a career. Most of them choose to become school nurses or industrial nurses, and they seem to feel that such work offers more certain employment and that it is less confining. A nurse in these positions is more or less "on her own," and there certainly is less restraint than when she is working under the specific directions of an attending physician as is the case when caring for the sick patient, at home or in the hospital. It is this "freedom" that brings about situations which need to be corrected and which leads us to approach the subject editorially.

Too many of our nurses, engaged in other than looking after bedfast patients, are wandering far afield and engaging in practices for which they are not trained. We specifically refer to the habit of many of them to indulge in diagnoses, to criticize the opinion of physicians and, in short, to engage in the practice of medicine. Cases in point will occur to almost any physician who encounters any considerable number of school and city nurses. For instance, recently a school lad (a charity case) who had been under the care of his own physician for some time, was given a series of refractions, and after the fourth refraction, the boy was given lenses which gave him better vision than he ever had before. Three weeks later he returned to his oculist, saying that the school nurse had told him his vision was subnormal and that he should have his glasses changed! Another case was that of a youngster who was referred to an oculist for an eye examination which proved to be negative; the vision was normal, even under atropine. His parents were highly incensed when so advised, stating that the school nurse had said that the boy had a high degree of visual error and needed glasses at once. The nurse was contacted and the condition explained, but subsequently she sent the child elsewhere for a refraction and he now is wearing, spasmodically, a quarter diopter spherical correction! The boy has his glasses, the nurse has had her way, the parents are satisfied, but the physician is discredited.

In the industrial field we find similar instances where the nurse strays far from the limits of her profession and attempts the treatment of patients who should be cared for by the company's physician. Infections of various sorts occur as a result of these ministrations.

We are not altogether critical. There are numerous examples of efficiency of the highest sort. Many of our nurses become indispensable, for they do their work exceedingly well and are a distinct asset to the healing art. We recall a school nurse of this type who pioneered in her little city and developed her profession into an art. She was a determined person and once she found a youngster who needed attention, there was no let-up until the needed attention was given. More than once she carried her fight into the county juvenile court, and she won her point in every instance. Once we said she was the best school nurse in her county; later we took in her state; finally, we declared her to be the best ever.

Some of the faults outlined here are due to the medical profession, for some physicians are prone to shunt this or that duty to the nurse, first in a supervised capacity, later forgetting the supervision. Most nurses will listen to the suggestions of physicians, and those who will not should be summarily dismissed. Nurses should ever remember that they are subservient to the directions of physicians, and it is not their privilege to usurp the prerogatives of the medical profession.

OUR HOUSE OF DELEGATES

Considerable discussion was presented at the recent mid-winter meeting of the Council relative to our House of Delegates, the matter of attendance on the part of regularly elected delegates being the phase of the subject most commonly discussed.

A survey of attendance records during the past few years has shown that some of our county medical societies seldom are represented in these important sessions while other counties with more than one delegate do not have full representation. At the South Bend session last year one county entitled to four delegates had no representative at the first session of the House, and only one of the four was present at the final session.

Delegates from the county societies are among the most important officials, since the House is the law-making body of the State Association. Practically all resolutions and recommendations made during the year are acted upon by the House, together with any changes in the Constitution and By-Laws that are to be made. In the discussion, it was pointed out that with county society elections being held usually ten months before the Association's annual meeting, it is impossible for some of the elected delegates to know whether they can attend the meeting. In a few reported instances, this difficulty has been overcome by assigning to the county society president the duty of naming delegates a few weeks in advance of the convention. This method is somewhat unsatisfactory because it retards matters at headquarters through delay in the make-up of reference committees which form a vital part of the machinery of the House of Delegates. One society goes so far as to pay the actual expenses of its delegates.

A few councilors see to it that each county in their district is represented, and a few county society officials make it their business to get a delegate to the annual convention.

Delay in appointing delegates adds to the difficulties encountered in making committee assignments, and the procedures of the House of Delegates are slowed to an amazing degree. For instance, at South Bend, forty-two minutes were

consumed in the naming of reference committees when not more than ten minutes should be required. This and other unnecessary delays prolonged the first session of the House to some three hours, when thirty minutes should have sufficed to dispose of the routine business. Men go to our annual conventions to be instructed and entertained, not to sit in a convention hall for hours listening to monotonous iterations. Delegates are entirely willing to devote as much time as is required for legislative matters, but they prefer to "mill" around, meet up with Bill and Tom from other parts of the state, and do all of those little things that make the trips to our annual conventions enjoyable. The Council has discussed the whole situation and has asked our officials to take steps to expedite the business of the House to the end that the work of a delegate may become a pleasure instead of a bore.

The suggestion was again emphasized that delegates who make good and who regularly attend the annual conventions should be continued in office indefinitely. Numerous county societies, such as Laporte and Elkhart, have found this to be a wise move. Almost as far back as we can remember, J. N. Kelly and A. C. Yoder have represented these counties, and a convention without them would seem altogether incongruous.

The county societies, the councilors and the officials of our Association should combine forces in working out means whereby each county society will be represented at every annual meeting; there is no occasion for any county to fail to respond to Walter Carver's opening roll call.

THE GOVERNOR'S MESSAGE

In his first message to the legislature, Governor M. Clifford Townsend had the following to say about public health:

"Public health laws of the state were reorganized early in 1933 with a bold sweep toward reform. The state dropped its paternal, bureaucratic attitude of public health administration and called upon the professions, the hospitals and the lay public to make of public health a cooperative movement leaning toward public education and public service. Thus, for four years, we have had a public health program which has moved forward in harmony with the professions of medicine and dentistry, nursing and hospitalization; which has cooperated with the United States Public Health Service, the Indiana University Schools of Medicine and Dentistry, the American Legion, Parent-Teacher clubs, public school authorities, and women's clubs. I believe there is no legislative contribution which could be made that would add to this splendid state program of public health administration."

EDITORIAL NOTES

Counties with 100% Paid-up 1937 Memberships:

CARROLL, DEARBORN-OHIO, JENNINGS, SULLIVAN, SWITZERLAND, WASHINGTON, WHITLEY

Mayor LaGuardia, diminutive but effervescent mayor of New York City, is credited with this snappy remark: "Science could stop, today, and not do another thing for a hundred years, and government could not catch up with it." While we continue to maintain a most wholesome respect for government, we must agree that the New York mayor said a lot when he issued that little statement.

The lay press finally is publicizing the fact that syphilis is responsible for a large percentage of the bodily ills that cause our state institutions to be filled to over-flowing. This, of course, long has been known to the medical profession and it now becomes our duty, at a time when lay folk are syphilis-minded, to stress this fact to the utmost. Be it remembered that the Indiana profession is definitely committed to uphold Surgeon-General Parran in his syphilis control program. The time for Indiana physicians to begin such support is *now*, and the first thing to do is to report your cases *as the law requires.*

And now it's the oyster scare. Only recently a metropolitan paper quoted the city chemist of a northern Indiana city as saying that a check on the oyster supply of that city showed a dangerous number of bacteria, some eleven per cent of the samples taken having been considered unfit for consumption. It is presumed that he meant the use of these oysters in the raw state. While there has been a marked change for the better in the manner of handling oysters, commercially, it does seem that some dealers are grossly careless in handling this product. The average store keeps them in an open container; hence, contamination is easily brought about.

In the current number of The Journal appears a report of a committee on better English which was appointed by the Medical Council of Indiana University. The committee refers to an article

in the *Atlantic Monthly* for January, 1937, entitled "The State of the Language" in which attention is called to the need for more care in the written and spoken use of our language. We are wholly in accord with the committee's report and hope that their intention to send a copy of the report tc colleges and high schools over the state may be carried out. While we are not English purists, yet we have frequently had our teeth "set on edge" while reading some of the material that is submitted for publication in THE JOURNAL. You will be interested in the report. It is on page 73.

An unusual record of service to a community is recorded in Rush County, where three generations of physicians in the Sexton family have completed more than a century of medical service. Dr. Horatio Sexton was first and his son, Dr. Marshall Sexton, continued his work. Dr. Marshall Sexton became president of the Indiana State Medical Association in 1882, and his son, Dr. John Chase Sexton, followed in his foot-steps, serving as president of this Association in 1899. This is, indeed, an enviable record of service in a community which has been altogether appreciative, if we may judge by newspaper reports which followed the death of Dr. John Chase Sexton December 28, 1936.

With whatever winter we are to have still ahead of us, it may seem a little premature to mention vacations. We had much to say on the subject last year, and have been somewhat surprised and chagrined to learn that a good many Hoosier medics failed to take our advice. To our notion, vacations are vitally necessary to men of medicine—more necessary than to men of any other group. The adage about anticipation being greater than realization is not always true, but there are many pleasurable hours of anticipation in store for one who plans a vacation. A devotee of Izaak Walton even now is purchasing new tackle, repairing the old, oiling and polishing reels, admiring gaudy lures, and making plans for several months in advance. Right now outline your plans for a well-earned rest and a vacation. It doesn't matter whether your plans include fishing, touring, golfing, or what—but take that vacation, and get ready for it now!

After a service of five years as chairman of the Council of the Indiana State Medical Association, Dr. O. O. Alexander asked to be relieved of that duty, and Dr. Maynard Austin, of Anderson, was elected to succeed Dr. Alexander as head of that important group. Dr. Alexander will continue to represent his district in the Council; however, it is with regret that we note the passing of "Alex" from this important post for few men in Indiana have a more intimate, first-hand knowledge of Association affairs, and few men have given more freely of their time and talents to the furthering of organized medicine than Dr. O. O. Alexander, of Terre Haute. It is a great satisfaction to know that he will continue in the Council so that his broad grasp of Indiana medicine will be available to that group. Dr. Austin's election to succeed Dr. Alexander assures the Indiana profession of a continuance of the fine work that the Council has done in the past.

After long service as a member of the Executive Committee of the Indiana State Medical Association, Dr. Homer H. Wheeler, of Indianapolis, has presented his resignation. Dr. Wheeler deserves the thanks of our entire membership for his unswerving devotion to the multifarious duties of a membership on that all-important committee. We do not recall having seen a single committee report that did not carry his name as "among those present." The Executive Committee is one of the really hard working committees of the Association, and the enormous amount of work that comes before it each month requires many hours of hard work; occasionally it means an all-day session of six to eight hours of continuous labor. In resigning, Dr. Wheeler stated that he had enjoyed the relationship but felt that it was time to turn the task over to another. Dr. Wheeler's efforts and loyalty are deeply appreciated. The Council has appointed Dr. Carl H. McCaskey, of Indianapolis, to fill the vacancy.

An interesting editorial entitled "Barratry" appeared in the December 14th issue of the South Bend *Tribune* as follows:

"A physician who would be so unethical as to 'make business for himself' by causing people to become ill would, of course, be subject to prosecution under the laws pertaining to public health. This is generally understood. The existence of statutes to restrain unscrupulous lawyers may not be a matter of general public knowledge. One has been invoked in Indiana against two Marion County lawyers.

"The crime of which they are accused in the grand jury indictment is 'barratry.' An old Indiana statute decrees that 'whoever encouraged quarrels or lawsuits among the citizens of this state shall be deemed a common barrator and, on conviction, shall be fined not exceeding $500 and imprisoned in the county jail not exceeding six month.'" "Barratry," the Indianapolis *News* points out, is not a hazard peculiar to the legal profession. Unfaithful mariners also are classified as "barrators."

The *Journal of the A.M.A.* for January 2, 1937, carried the first issue of the *Bulletin of the A.M.A.* to be published with *The Journal*. Heretofore it has been a separate publication, issued several times each year. It is now a regular weekly feature of *The Journal of the A.M.A.* and, judging from the material already presented, we know that it will meet with a hearty reception from American physicians. In addition to the historical articles dealing with the early history of the parent organization, this department will carry stories from every departmental activity of the American Medical Association. News of the "flash" variety will be published as occasion demands, and the several pages each week will be found to be of unusual interest to men of medicine. Fellowship in the A.M.A., at seven dollars per Fellow, is a bargain, indeed, for it not only lines you up as an active Fellow in the greatest medical organization in the world, but brings you each week *The Journal of the American Medical Association*, chock full of good material, plus the newsy *Bulletin*. (The address is 535 North Dearborn Street, Chicago.)

Automotive accidents have definitely increased in Indiana during the past year, despite efforts of the various law enforcing agencies throughout the state. Our courts are "cracking down" on gross offenders, fines are stiffer and an occasional jail sentence is given, with which we are in entire accord. From observations made by several members-to-be of the coming session of the Indiana legislature, it seems certain that changes will be made in the present laws governing traffic conditions. An interesting question recently came up for discussion by a group which was considering this problem, that of how legally to determine when a person is intoxicated. It seems that the present law is not clear on the subject, and the prosecutor has a job before him when he attempts to prove a charge of operating a car while under the influence of intoxicants. That interesting little gadget exhibited at our state meetings by Dr. Harger, of the Indiana University Medical School, seems to make a diagnosis of intoxication in a most positive manner. Whether our courts have passed upon the admissibility of such evidence, we do not know.

At the closing session of the medico-legal conference held recently at the Medical Center in Indianapolis, a committee was named to draw up legislation designed to correct many of the evils in our present criminal laws. At this conference (several papers from which will appear in this and subsequent numbers of The Journal), various phases of criminology were thoroughly discussed by members from both the medical and legal professions. As Governor McNutt said, "What you have done today marks what I hope will be a series of such conferences; all forward-looking citizens observe your acts with more than a passing interest." There is no denying that Indiana criminal procedure needs an extensive overhauling; there is too much delay in the passing of official judgment in many of our criminal hearings. It is not for us to undertake the remedy; rather it is ours to commend the forward step that has so recently been taken. Indiana has been no laggard in forward movements during the past few years. Indiana medicine always is in the van in worth-while movements, and the same may be said of her citizenry in general.

A few of our members have registered complaints concerning the difficulty of getting hotel accommodations at the South Bend convention. A check on these complaints reveals some interesting facts. First, none of the complainants had made advance reservations in spite of the fact that "Convention Bill" and The Journal had made repeated pleas that reservations be made early. The hotel committee had reserved 800 rooms in South Bend hotels, and on the second day of the convention there were some sixty rooms unoccupied. Naturally, the hotel managers gave those rooms to any who applied and they cannot be censured for that since hotel income is derived chiefly from room rentals and vacant rooms mean losses. The optimism that some folk display about hotel accommodations is amazing. They will leave home perhaps on Tuesday afternoon, arrive at the convention city that evening or late at night and confidently expect to walk into any hotel and be permitted to have their choice of rooms! Better begin to think about the French Lick session, right now. There are plenty of rooms in that big hostelry, but remember that early comers get the best assignments.

Following the ruling of the Indiana State Board of Medical Registration and Examination, some time ago, to the effect that anesthetics should be administered only by physicians, there was considerable discussion of the pro and con variety among the members of the Indiana medical profession. The general consensus at the present time seems to be that the ruling was well advised and most hospitals have made the necessary provisions to comply therewith. The *New York State Journal of Medicine* for January 1, 1937, carries an interesting comment on a similar situation in that state. At the April, 1936, session of the New York

State Medical Society, a mandate was issued calling upon the legislative committee to proceed in securing legislation which would permit only physicians to administer anesthetics. However, the Council made an investigation of the matter and recommended that such legislative action be postponed for a year, basing their suggestion upon the request of New York members of two national societies of anesthetists, and the request was made chiefly because it was determined that there were not enough medical anesthetists within the state to do the work of the nurse anesthetists then employed. Further, many New York state surgeons were not certain that such a move would be beneficial. Ultimately it is believed that such legislation will be sought in New York but the necessary "missionary work" must be carried out first.

The headquarters office of the Association has received several inquiries regarding a Chicago collection company which has been soliciting accounts for collection from physicians and others in Indiana. The contract used by this company provides that the physician assign and sell to the company the accounts listed, it gives the company full power and authorization to settle, receipt and endorse any checks, notes or any other papers, and it also gives the company a rather broad power of attorney. We can only repeat what we have said hundreds of times before in reference to collection agencies: READ BEFORE YOU SIGN!

The Indianapolis Better Business Bureau recently has been receiving inquiries concerning the reliability of publishers who have been soliciting sketches of the lives of deceased persons. There are in this country several publishers who make it their business to call upon widows or other close relatives of deceased persons, praising them, and attempting to persuade the relatives that a suitable memorial would be a biographical sketch in one of their books. Frequently, the grief-stricken family will agree to the suggestion, and they are told that there will be a small charge, probably for the steel plate engraving. Reports to the Bureau indicate that those charges have varied anywhere from $250 to $5,000, and if the relatives refuse to pay the bill they soon find themselves on the losing end of a legal action. There are vultures in every business.

Considerable water has gone over the dam since the enactment of the commonly called "drugless amendment" to the basic medical law of 1897. Several hundred of the drugless folk have been duly licensed to carry on in Indiana, and many of them seem to have adopted various and sundry healing activities in addition to those for which they were presumed to be licensed. Due chiefly to the fact that our medical law is more or less of the edentate variety, these folk have extended their field with little or no hindrance, and this situation seemingly has developed to the point where occasionally it is assumed that the State of Indiana will stand for almost anything. However, "tops" was reached the other day when the Appellate Court handed down a decision in a case appealed from the Marion Circuit Court. 'Way back in 1925, a thirteen-year-old lad enrolled in a so-called college of drugless therapy, and graduated therefrom a year later. Six years later he filed application for a certificate before the Indiana State Board of Medical Registration and Examination which was promptly and properly denied. Suit was brought to mandate the Board and over-ruled in the lower court. The Appellate Court upheld the lower court and that action should end the controversy. This, of course, is only one of the examples of tomfoolery that result from compromise legislation, which is exactly what the 1927 amendment was. We are of the opinion that compromise is a very poor way to end an argument before our legislature.

In an article appearing in the *Journal of the American Medical Association* for December 26, 1936, an Indiana physician, Dr. Lyman T. Rawles, of Fort Wayne, has been accorded belated credit for his discovery of the cause of grain itch. Dr. Herman E. Kittredge, clinical instructor in dermatology in the George Washington University School of Medicine, has made an extensive study of the subject and found that Drs. J. F. Schamberg and Joseph Goldberger have been credited in textbooks with priority in the discovery of the cause of grain itch, but that Dr. Rawles' work preceded that of Drs. Schamberg and Goldberger by a month; Dr. Rawles made his investigations in May, 1909, and the work of Drs. Schamberg and Goldberger was done in June, 1909. While the latter physicians published their report of their work in July, 1909,[2] the report of Dr. Rawles' investigations did not appear until August, 1909.[3] Indiana physicians will be glad to know that Dr. Rawles' priority in this work has been definitely established and that, even though belated, credit is given where it is due.

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[1] Kittredge, Herman E.: Priority Among American Physicians in Demonstrating the Cause of Grain Itch. Tardy Credit Therefor Given to Dr. Lyman Talmage Rawles. *J. A. M. A.* 107:2109 (Dec. 26), 1936.

[2] Schamberg, J. F., and Goldberger, Joseph: Epidemic of an Urticarioid Dermatitis Due to a Small Mite (Pediculoides Ventricosus) in the Straw of Mattresses. *Pub. Health Rep.* 24, Nos. 27-53 (July-Dec.), 1909.

[3] Rawles, L. T.: Dermatitis Ditropinotus Aureoviridis; Synonym, Straw Itch. *Jour. Ind. State Med. Assoc.*, 2:337 (Aug. 15), 1909.

WASHINGTON CONFERENCE ON VENEREAL DISEASE CONTROL

By F. R. NICHOLAS CARTER, M.D., Chairman
Committee on Syphilis Control

Battle lines for a fight to the finish on venereal disease were drawn in Washington on December 28, 29 and 30.

At a conference attended by nine hundred men, representing every field of medical activity (private practitioners, skin specialists, professors from teaching institutions, representatives of state health departments, pathologists and laboratory technicians, local public health officials and representatives of the federal government), deliberations were entered into in which principles and methods which should be useful in every community in the country were discussed.

THREE METHODS OF HANDLING INDIGENT PATIENTS

Throughout the following article the medical profession must remember that there are three methods of handling indigent patients:

(1) Handling patients in already established out-patient departments of hospitals. In this system the staff of the hospital performs the service without remuneration.

(2) Establishing of clinics wherein a director is employed at the expense of the local health unit. Public health clinics fall within this classification.

(3) The treatment of a patient in the doctor's office, the state supplying the drugs through the local or state health agency. In this case the physician's services are rendered free to the patient. This method does not take the patient away from the doctor and it pre-supposes that at a later date, when the patient is no longer indigent, he will still be the patient of his family physician on a paying basis.

ELEVEN POINTS OF DISCUSSION

Following the suggestion of the United States Public Health Service that all state medical associations appoint committees to cooperate with their local state boards of health in the administration of problems concerning the control of venereal disease, the Indiana State Medical Association appointed a committee to cooperate with the Indiana State Division of Public Health. This committee met with representatives of the state board of health at a time previous to the Washington conference. Eleven points were brought up for discussion at the time of this preliminary meeting.

1. The system of notification most suitable to physicians, patients and health agencies.

It was the consensus of opinion that the system of notification used in the state of Indiana was not successful. Reasons for this were discussed at length. The outstanding reason why doctors do not report cases of syphilis is that they gain nothing by so doing and that they betray the confidential relationship between themselves and the patient. It was suggested that reports be made by number or initials. The state investigator considered this system inefficient in that it created no definite identification of an individual.

At the Washington conference the reporting of names and addresses was given unanimous approval by a vote of all those attending the meeting. The opinion was voiced that a doctor had no reason to report his cases. If a doctor could be assured that an investigator would follow up a patient in case he failed to come for treatment, or that an investigator would be willing to search out contacts, it was thought that he would have some reason to report to the state.

2. The additional laboratory facilities needed for diagnosis of syphilis.

The state of Indiana is unfortunate in that it has some areas which are unable to support pathological laboratories. In certain sections of Indiana it is almost impossible to obtain laboratory diagnosis. The difficulty of obtaining dark-field examinations in these localities was discussed. It seemed to the committee that it would be a wise procedure to insist that medical schools require all students to purchase dark-field equipment. The group was informed that this equipment could be purchased for as low as five dollars additional cost to the microscope, which is a requirement in all medical schools. The committee thought it advisable to publicize the availability of laboratory services in definite sections of the state. The committee advised the reviewing of serological tests, emphasizing the fact that the Wassermann was negative for some time after the appearance of a chancre. Educational propaganda designed to effect this end was thought desirable.

The Washington conference unanimously voted that all serological tests should be made free to the general public. The Indiana state committee, in considering this matter before the Washington meeting, recommended the state's subsidation of the approved laboratories in Indiana where these tests might be conducted.

3. The policy recommended in the distribution of anti-syphilitic drugs.

The committee felt that the state's efforts to distribute salvarsan and neo-salvarsan was very commendable. The opinion was expressed that bismuth

and mercury should be included with these two drugs.

The Washington conference unanimously voted approval of the state supplying free drugs to indigent and non-indigent alike. At the present time three states are supplying drugs to all classes of people.

4. The adequacy of free treatment facilities for those who can not pay physicians' fees.

A system is already in operation in Indiana. Indigent patients may be treated in their own family physician's office, with the state supplying the drugs. There are thirteen free clinics in Indiana and five state institutions. The state furnishes one-half of the drug requirements to the free clinics.

By the approval of free drugs which is mentioned above, the adequacy of free treatment facilities of indigents in the family physician's office is covered.

5. The nature and extent of the additional facilities needed to carry out a state-wide venereal disease prevention campaign.

No definite decision was reached on this point. After the list of available laboratories is published, the committee will discuss any additional need. This is a state problem. No decision was reached by the conference at Washington.

6. The physician's part in the application of epidemiologic methods for the control of syphilis.

The committee felt that all epidemiological data could be secured if the doctors filled in the report card which is already supplied by the state board of health.

The consensus of opinion at the Washington meeting appeared to be that if the state wished to secure epidemiological data it was the duty of the state to supply some investigator whose duty it would be to obtain this information. This would be a matter of cooperation between the doctors and the state.

7. The possibility of developing minimum standards of treatment for early syphilis.

Discussion was brought out at this point, relative to the difference between public health and public welfare. It was the opinion of the committee that the state's function in controlling syphilis was in making an individual non-infectious to others. After this had been accomplished it became a matter of public welfare. The question arose as to what constitutes minimum treatment for an infected individual. It was the opinion of the men present that if an individual were treated for one year that he might at that time be considered non-infectious to others. It was realized that a man who had syphilis might be faced with an economic handicap should he be unable to obtain a negative Wassermann after the duration of the minimum treatment time. The thought was expressed that so long as an infected individual was undergoing treatment he might continue working regardless of the type of work. The advisability of formulating some method whereby a man who had had a year's treatment and was no longer infectious to others, might be so designated, was discussed. A year's treatment should consist of a certain definite number of doses of salvarsan accompanied by bismuth or mercury therapy.

The minimum standard of treatment as agreed upon by the Washington session consisted of twenty injections of neosalvarsan and twenty injections of the heavier metals, bismuth and mercury. Contrary to the opinion of the Indiana state committee, the Washington conference favored treatment of an individual until he was cured according to present day serological standards.

8. The availability of hospital beds for treatment of cases needing hospitalization.

The committee felt that hospitalization is adequate in Indiana. However, the Washington conference felt that hospital beds should be available for incorrigible cases which needed treatment, and, further, that isolation laws should be made use of.

9. Methods for the more adequate prevention of congenital syphilis through recognizing and treating the disease among pregnant women.

The committee opined that education was a predominant consideration in teaching mothers the prevalence of syphilis and the desirability of having a Wassermann test. In this connection it seems advisable to conduct a campaign, urging doctors to do Wassermanns on all pregnant women—positive tests would necessarily be followed up with sufficient treatment to control the disease during the period of gestation.

The Washington session went definitely on record as favoring an educational campaign to acquaint mothers with the advisability of the Wassermann test. A resolution favoring a Wassermann test on all pregnant women was unanimously voted upon.

10. The lines along which informative and educational programs should be conducted.

The committee felt that anything which would educate the general public concerning the ravages of syphilis was desirable.

The Washington conference endorsed the opinion of the state committee.

11. The possibilities of prophylactic measures being taught and administered through physicians' offices, out-patient hospital services and clinics, with the thoroughness and precautions governing Army and Navy procedures.

The advisability of this program was considered from different view points. A knowledge of the success of prophylaxis in the Army was brought before the meeting. However, the lack of police power which the Army has in civilian life was cited. The condemnation of many societies could be anticipated. The value of prophylaxis was realized, but its advisability in any other than an educational way was questioned.

FEDERAL APPROVAL OF STATE PLAN FOR SERVICES TO CRIPPLED CHILDREN

By
OLIVER W. GREER, M.D.
Director, Services to Crippled Children
Indiana Department of Public Welfare
Indianapolis

Approval of the Indiana State Plan for Services to Crippled Children was granted by the Children's Bureau of the Department of Labor, January 12, 1937. Indiana is now participating in all phases of the Social Security Act. The budget for the third quarter of the fiscal year 1936-1937, which was also approved, provides for a federal grant-in-aid amounting to $27,602.60.

ENUMERATION OF CRIPPLED CHILDREN

Enumeration of all crippled children in the state has been instituted with the assistance of the State Department of Public Instruction. This survey is also being conducted in Catholic and Lutheran schools in an endeavor to complete a state register of all crippled children within the state of Indiana.

Cooperation of all members of the Indiana State Medical Association is earnestly solicited in the completion of this survey.

DEFINING THE CRIPPLED CHILD

A crippled child, for the purposes of the Indiana survey, shall be defined as

"a child under sixteen years of age, who, from any cause, is deprived of the free and normal use of any of his limbs, or who shall be deprived of strength or capability for service due to bone, tendon, joint or fascial deformity caused by accident, injury or disease; neuro-muscular affection due to disease, birth injury or other trauma; cicatricial scars which limit motion of extremities; or crippling physical defects, congenital or acquired, that may be benefited by surgical or other medical procedures."

THE ACCOMPANYING YELLOW PAGE

A QUESTIONNAIRE is herewith attached for your convenience. You are urged to complete this questionnaire, listing thereon all crippled children of whom you have knowledge. Although only indigent or borderline indigent cases will be assisted, this confidential information of all crippled children is greatly desired. After completion of the questionnaire, *please return same to your local secretary*, or to Oliver W. Greer, M.D., 141 South Meridian Street, Indianapolis.

APPEAL TO ORTHOPEDISTS

An appeal is hereby made by the State Department of Public Welfare for all orthopedists within this state to become certified by a recognized national organization. Councilor districts will be asked to recommend the names of reputable orthopedists to conduct orthopedic consultation services within their own councilor districts.

NON-INDIGENT cases of spastic paralysis will be admitted, in the near future, to the James Whitcomb Riley Hospital on a paying, out-patient basis. Special appropriations have been made to provide for increased facilities to care for non-indigent as well as indigent cases. This is to be a specialized type of service for your cases who are financially able, but heretofore have been unable to secure the technical treatment as given by trained physiotherapists, occupational therapists and speech pathologists.

DECENTRALIZATION

DECENTRALIZATION of care for crippled children is provided for by the selection of South Bend and Evansville as hospital centers in addition to the James Whitcomb Riley Hospital. This proposed decentralization has been accepted by the members of the technical sub-committee of the general advisory committee. These members are: Dr. R. L. Sensenich, South Bend; Dr. I. C. Barclay, Evansville; Dr. F. S. Crockett, Lafayette; Dr. C. J. Clark, Indianapolis; Dr. John H. Green, North Vernon; Dr. Leonard Ensminger, Indianapolis, and Dr. Louis Belden, Indianapolis.

Hospitals to be utilized in the program for service to crippled children in South Bend and Evansville have not yet been selected.

YOUR ASSISTANCE IS URGED BY THE STATE DEPARTMENT OF PUBLIC WELFARE IN COOPERATING WITH THE COUNTY DIRECTORS OF PUBLIC WELFARE AND FIELD REPRESENTATIVES OF THE STATE DEPARTMENT IN ORDER THAT THE PLAN FOR SERVICES TO CRIPPLED CHILDREN IN THE STATE OF INDIANA WILL BE SECOND TO NONE!

A GENERAL ADVISORY COMMITTEE, consisting of the following individuals, has been appointed by the Indiana State Board of Public Welfare:

Mr. Hugh McK. Landon, Chairman Joint Executive Committee, James Whitcomb Riley Hospital for Children.
Dr. E. D. Clark, President, Indiana State Medical Association.
Dr. J. J. Berkey, Fort Wayne, President Indiana State Dental Association.
Dr. Verne K. Harvey, Secretary State Division of Public Health.
Dr. Robert Acker, South Bend, Orthopedist.
Mr. Val Nolan, Trustee, Indiana University.
Mrs. Perry W. Lesh, Occupational Therapy, Indianapolis.
Mr. Roy E. Fenn, Tell City, Kiwanis.
Ben Sherwood, Bedford, Rotary, Former District Governor and crippled children permanent committee.
Mr. Jap Jones, Fort Wayne, Lions.
Mr. Art Lemon, Greensburg, American Legion Child Welfare Chairman.

(Continued on page 95)

ACTIVITIES OF A FULL-TIME HEALTH DEPARTMENT

By JOHN W. FERREE, M.D.
Chief of Bureau of Local Health Administration
Indiana Division of Public Health

Last month a special article appeared in this JOURNAL defining a full-time health department, and giving briefly a few historical facts concerning this type of local health administration.

What follows is an elaboration on the organization and functions of a full-time health department. In the outline of organizations the responsibilities and interrelationships of all those concerned in such a department are evident. The activities are then dealt with in detail on a purely functional basis. Such activities, we believe, are commonly accepted as being legitimately within the province of public health administration. **Specific programs in any locality are to be worked out with the local medical society before being put into effect.**

1. **Vital Statistics**
   a. Births. Keeps local records and issues certificates to applicants requesting them. Sends original certificates to the State Board of Health.
   b. Deaths. Keeps local records. Issues burial permits. Sends original certificate to the State Board of Health.

ORGANIZATION AND FUNCTIONS OF FULL-TIME HEALTH DEPARTMENT

DIRECTOR STATE BOARD OF HEALTH

BUREAU OF LOCAL HEALTH ADMINISTRATION

Consultative

Medical Society

Cooperative

Advisory Council (Tuberculosis Society, Red Cross, P.-T. A., etc.)

Appointive

County Commissioners or Common Council of City. (See Chapter No. 217, S. 233, Section 5 of the Acts of 1935.)

Functions:

a. Selects health officer and his personnel subject to approval of State Board of Health.
b. Provides for the expenses of the Department.
c. Receives reports of health officer.

LOCAL DIRECTOR (COUNTY, CITY OR TOWN)

Functions:

a. Executive—plans and coordinates activities.
b. Communicable disease control.
c. Examination of pre-school children and school children on basis of arrangements made with medical society.
d. Makes such health rules and regulations as may be necessary, so long as they do not conflict with the state.
e. Public health education.

Sanitary Engineer or Sanitation

Functions:

a. Sewage disposal.
b. Water supplies.
c. Food and food handlers.
d. Nuisance abatement.
e. Mosquito eradication.
f. Lighting and ventilation in public buildings.
g. Education.

Nursing Service

Functions:

a. Pre and post natal work through the practicing physicians.
b. Infant hygiene.
c. Preschool hygiene.
d. School hygiene.
e. Adult hygiene.
f. Communicable diseases.
g. Public health education.

Secretary

Functions:

a. Office business.
b. Vital statistics and reporting of communicable diseases.
c. Handles and distributes supplies.
d. Education.

c. Obtains reports of communicable diseases and records them. Forwards these records to the State Board of Health along with weekly summary.

II. Communicable Disease Control

a. Carries on a continuous and stable immunization program against diphtheria, smallpox and typhoid fever.
b. Isolates cases of communicable disease. Finds contacts and carriers, and appropriately deals with them.
c. Releases isolations and quarantines.
d. Inspects school children as necessary for evidences of communicable diseases.
e. Makes rules and regulations, not in conflict with the state, as necessary for control of epidemics.
f. Makes instructional home visits for aid in proper care of patient and for advising as to proper precautionary measures.
g. Arranges clinics for tuberculous patients, suspects, and contacts, and obtains proper management for them. Follows this up with home visits for instructional purposes.
h. Cooperates with the physicians and venereal disease clinics in all ways possible for the control of venereal disease. Follows up cases where necessary to see that they report for treatment until infectiousness is not present.
i. Provides supplies and information that will facilitate utilization of the State Board of Health Laboratory for the diagnosis of communicable diseases, discovery of carriers, and for determining release of quarantine.

III. Maternal and Infant Hygiene — Pre-School Child, 1-6 years

a. Advises prospective mothers as to the necessity of securing medical supervision early in pregnancy, and aids her in making preparations for the delivery and care of the infant, and in securing post-partum examinations by her family physician.
b. Arranges for assistance at home confinements and post-partum care for mother and baby.
c. Aids in securing medical supervision and instructs the mother in carrying out the doctor's orders in relation to feeding the baby. Demonstrates the proper nursing care of infants.
d. Sees to it that any developing defects in the preschool child are corrected and that the child is physically and mentally in the best possible shape for starting in school.

IV. School Hygiene

a. Examines school children and interprets the results to teachers and parents. Follows up on suggested recommendations.
b. Secures proper and adequate attention for mental deficients and behavior problems. Aids the family in adjusting home life in such a way as to correct habits and tendencies in the child that, if allowed to develop, might result in serious consequences in future life.

V. Sanitation — Environmental

a. Sees to it that there are proper facilities for excreta disposal.
b. Makes as frequent checks on the water supplies, both public and private, as deemed necessary. The safety of swimming pools and public bathing resorts is also its concern.
c. Inspects all food vending and food producing places, such as dairies, pasteurizing plants, slaughter houses, meat markets, restaurants, lunch counters, ice cream plants, tourist camps, etc.; and enforces rules and regulations pertaining thereto.
d. Checks on lighting, ventilation, screening, and general cleanliness of public buildings, hotels, schools, churches, etc.
e. Handles the problems of nuisance abatement.

VI. Health Education by:

a. Lectures.
b. Motion pictures.
c. Bulletins.
d. Newspaper articles.
e. Exhibits at fairs, school functions, etc.
f. Personal contact and home visits.

Such a group of activities, if actively supported and encouraged by the medical profession, will do much to quiet the ever rising hue and cry of those advocating socialization of medicine. It will do this because it will steal much from the basis of their appeal—inadequate distribution of medical services. Yet the type of organization here advocated, carrying on the above functions, retains the physician in his rightful role of guardian of the people's health. Mere passive cooperation will not be enough—the support and encouragement must be active.

Finally, it may be stated, without fear of contradiction, that in those places where such activities have been properly carried on, the financial rewards from the practice of medicine have been increased.

FEDERAL APPROVAL OF STATE PLAN FOR SERVICES TO CRIPPLED CHILDREN

(Continued from page 93)

Mr. Ferd Kahler, New Albany, Shriners.
Mr. Frank J. O'Rourke, Hammond, K. of C.
Mr. Murray Auerbach, Secretary Indiana State T. B. Association.
Mr. Slater Bartlow, Director of Vocational Rehabilitation, State Department of Public Instruction.
Mrs. Grace Hatfield Edmondson, Bloomington, P.-T. A., Indianapolis.
Dr. Herman M. Baker, Evansville, President-Elect, State Medical Association.
Lulu Cline, South Bend, Indiana State Nursing Association, Chairman, Public Health Nursing Section and Director and former President.
Bess Kinsey, American Red Cross, Field Worker, Southern Indiana District.
Mrs. O. M. Kinnison, President, Kappa Kappa Kappa, Goshen.
Mrs. Waneta Frederick Hughes, Psi Iota Xi, Past Grand President, Kokomo.
Dr. George J. Garceau, Orthopedist, Riley Hospital.
Mabel Pumphrey, Greensburg, Delta Theta Tau.
Mr. T. B. Ranson, Attorney, Indianapolis.
Mrs. Chas. T. Boynton, Child Welfare Chairman, League of Women Voters.
Mrs. J. A. Goodman, Indianapolis.
Mr. Paul C. Stetson, Superintendent Indianapolis Public Schools.
Dr. W. D. Gatch, Dean, Indiana University School of Medicine.
Mr. Floyd I. McMurray, Superintendent of State Department of Public Instruction.
Dr. Sumner A. Furniss, Indianapolis.
Chas. B. Staff, Judge Circuit Court, Franklin.
Mr. Thomas D. Sheerin, Catholic Layman, Indianapolis.
Mr. Wm. H. Book, Chamber of Commerce, Indianapolis.

This committee will correlate the activities of various public and private agencies which have manifested an interest in the development of this project.

FEDERAL INCOME AND SOCIAL SECURITY TAXES

WILL H. SMITH
Collector of Internal Revenue
District of Indiana
Indianapolis

Federal income tax returns are due to be filed on or before March 15, 1937, for the calendar year 1936. Those required to file returns are every single person (or married and not living with husband or wife) who receives a net income of $1,000 or over, or a gross income of $5,000 or over, and married couples receiving a combined net income of $2,500 or over or a gross income of $5,000 or more. Professional men should file their returns on Form 1040, in duplicate.

CREDITS AND EXEMPTIONS

A taxpayer is entitled to a personal exemption of $1,000 if single, or $2,500 if qualifications as head of a family can be established. Married couples living together are entitled to a combined personal exemption of $2,500. In addition to the personal exemption, a credit of $400 is allowed for each dependent actually supported by the taxpayer. Any such credit must be explained in Schedule F of the return. A "dependent" is defined as a person (other than husband or wife) under 18 years of age, or mentally or physically incapable of self-support, who actually receives from the taxpayer more than half the funds necessary for his or her support during the taxable year.

A "head of a family" is an individual who actually supports and maintains in one household one or more individuals who are closely connected with him by blood relationship, relationship by marriage or by adoption, and whose right to exercise family control and provide for these dependent individuals is based upon some moral or legal obligation.

In addition to personal exemption and credit for dependents, an "earned income credit" is allowed to the extent of ten per cent of actual earned income. All income for professional services is considered as "earned." Even though an assistant is employed to render such services, if the client or patient is primarily the taxpayer's and he is responsible for the services rendered by the assistant, fees from such services are considered to be earned income of the taxpayer. All income, regardless of source, up to $3,000 is considered as earned. The earned income credit may not exceed ten per cent of the "net income" as disclosed in item No. 20 of the return, and in no case may exceed $1,400. If a physician, in addition to professional services, dispenses medicines or drugs, making a charge therefor, he is considered to be operating a business in which both personal services and invested capital are income-producing factors, and as such is entitled to claim only twenty per cent of net income as "earned income" and ten per cent of that twenty per cent as an earned income credit. However, if the physician primarily performs personal services and in so doing dispenses drugs or medicines, making no charge therefor, the above ruling does not apply and all fees are considered as earned income.

Allowable deductions from the gross income have not been changed. Office rent, assistants' salaries, depreciation of equipment, and the necessary expenses in pursuit of business are still deductible.

Under the Revenue Act of 1935, there must be included in income recovered by insurance annuities for each taxable year, three per cent of the cost of such annuities. Dividends from all domestic corporations are subject to both normal and surtax under the Revenue Act of 1936.

SOCIAL SECURITY TAXES Title VIII

Title VIII of the Social Security Act imposes an excise tax on employers (irrespective of the number of individuals employed) and an income tax on their employes measured by the amount of wages paid on and after January 1, 1937, with respect to employment on and after that date. The rate of each tax for the years 1937, 1938, and 1939 is 1 per cent of the wages paid.

The term "*wages*" means all remuneration paid for employment, whether in cash or in any medium other than cash, excluding any amount in excess of $3,000 paid to an employe for employment performed for an employer during any calendar year. If during any calendar year an individual is in the employ of more than one employer, the $3,000 limitation must be applied separately to the remuneration received from each employer. For example, for employment performed for employer M during the calendar year 1937, X receives $3,000, and for employment performed for employer N during such year X receives $5,000. The $3,000 received from M and $3,000 of the remuneration received from N, or an aggregate of $6,000, constitutes wages subject to both employers' tax and employes' tax. The Act provides that the employer shall collect the employes' tax by deducting the amount of such tax from the wages as and when paid. The employer is liable for such tax whether or not so withheld.

These taxes should be reported on Form SS-1. Each return must be filed with the collector of internal revenue for the district in which is located the principal business of the taxpayer, and must be in the hands of the collector on or before the last day of the first month succeeding that for which the return is made. The return for January, 1937, is due on or before February 28, 1937.

(Concluded on page 112)

MEDICO-LEGAL COLUMN

ALBERT STUMP, ATTORNEY FOR THE INDIANA STATE MEDICAL ASSOCIATION

LIABILITY FOR NON-ADMINISTRATION OF TETANUS ANTI-TOXIN

The physician owes a duty to his patient to recommend the administration of tetanus anti-toxin in all proper cases, and undoubtedly would be held liable for damages resulting from his negligence in not advising such administration in a proper case, where any damages resulted from his failure to do so. In any case predicated on the negligence of the doctor in failing to advise the administration of tetanus anti-toxin, the proof as to the advising or failing to advise as to the necessity of the administration would be a determinative factor. For this reason, a physician should make a record of the time, place, and person to whom such recommendation was made as a part of his case record. The same care in preservation of case records should be used even though the patient is in a hospital.

There may be circumstances where, however, the mere ordering of the administration of the anti-toxin in the hospital would not be sufficient to protect the physician against liability for the failure of its administration. If the physician knows that the anti-toxin will not be administered, on account of some rule in the hospital, then apparently it becomes his duty to assume some responsibility for procuring the remedy so that it can be administered. We reached this conclusion from a consideration of Section 31-701, Burns Revised Statutes of 1933, which provides for obtaining anti-toxin without cost for an indigent patient.

Under this section the county, city or town is made responsible for the cost of the anti-toxin for administration to persons too poor to pay for it. The mechanics provided for by this act are as follows:

(1) An official application blank is prescribed, and printed, by the State Board of Health and supplied to County, City, and Town Health Officers. The blank provides for certain information including the name and address of the person to be treated, the quantity of anti-toxin necessary, and the affirmation of the physician applying that it will be administered to the person applying, and that it is his belief after inquiry that they are too poor to pay for the same;

(2) A physician may procure a blank from any county, city, or town health officer;

(3) The blank, when filled in and signed by the physician, is to be presented to any dealer who is authorized to furnish the anti-toxin without cost to the physician or the person to whom it is to be administered. The blank in the hands of the dealers is a legal claim for the market price of the anti-toxin furnished, against the county, city or town in which used and against which the blank is issued.

In regard to indigent patients, therefore, it appears that the physician, in addition to owing a duty to recommend the administration in proper cases, also has the duty of procuring the anti-toxin under this section for indigent persons, or at least of procuring and executing the blank through which the indigent person may obtain the anti-toxin.

If the hospital itself has a supply of the anti-toxin, the hospital should furnish it upon having this application presented.

Whether the hospital is a charitable hospital or a private hospital would not be determinative of its duty to furnish the anti-toxin upon the presentation of the proper application; but it would determine the extent of the liability for any damages due to the failure to furnish the anti-toxin. A charitable hospital could not be liable in damages, whereas a private hospital could be. But the official in the charitable hospital who failed to perform his duty may have a personal liability if he failed to perform his duty in regard to the furnishing of the anti-toxin when proper application was made.

What has been said up to this point applies to indigent patients. But suppose a physician has a patient of whom he cannot certify that he is too poor to pay for the anti-toxin. We believe it is the duty of the physician to inquire of the patient, or those responsible for his care, concerning his ability to pay; and if he finds that he is unable to pay, then to make the proper application. But if he cannot honestly make that certificate as to his inability to pay, he should not fail to order the anti-toxin to be furnished. Then if the hospital refuses to issue the anti-toxin as ordered, on the ground that there has been no proper provision for the payment and that it is not reasonably certain that payment would be forthcoming, the physician could protect himself by bringing the case to the attention of the township trustee as overseer of the poor. The duty devolves upon the township trustee in that capacity to furnish medicine necessary to the treatment of a poor person. It is his duty to make investigation in that regard. If the trustee fails to perform that duty, it has been held by the Supreme Courts of several states that the patient, if he lives, or his personal representative if he dies, may have a cause of action against the trustee for damages for the failure to perform his duty as overseer of the poor.

Up to this point we have considered the situation in the absence of any emergency requiring immediate action. If such an emergency exists and time is lacking in which to procure a blank from the proper health officer, then the anti-toxin should be administered to meet the immediate emergency. In view of the decision made in *Newcomer vs. Jefferson Twp.*, 181 Ind. 1, it is our

opinion the blank could be prepared afterwards and the certificate furnished as to the indigent condition of the patient, or the case could be brought to the attention of the trustee if the physician could not honestly make the certificate.

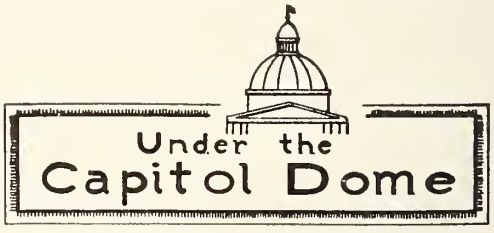
While it is clear that the anti-toxin should be administered where necessary, it is not clear whether the official of the hospital who had charge of giving out the anti-toxin or withholding it, or the physician in charge of the case would be liable for the failure to administer the anti-toxin. This difficult question would be answered upon the determination of what the custom or practice generally prevailing with relation to patients in that hospital is. If the hospital in the services which it renders to its patients furnishes the remedies upon the orders of the physician and undertakes the compliance with the physician's orders as part of its services, then if the physician relies upon that as the service the hospital obligates itself to give, he would not be liable unless he knew that the hospital in the particular case was refusing to do so. The hospital official and the physician might conceivably both be liable for failure. If the hospital official knows that he is being depended upon to supply the remedy, he would not be justified in refusing to do so because of uncertainty of payment. If an emergency exists, the trustee is obligated to pay in event the person is found indigent. If an emergency does not exist, the trustee can be contacted in advance and he is then obligated to furnish the remedy unless the remedy can be obtained by a certificate honestly made by the physician concerning the indigency. If the person is not an indigent, the hospital can collect its bill afterwards.

The physician is not obliged to furnish the remedy, but he is obliged to do all of the things reasonably connected with the treatment of the case that would be necessary to procure the remedy. If he has done all the things reasonably necessary to procure the remedy and the hospital official fails, then the hospital official would be liable. If he has not done all the things in connection with the procuring of the remedy, such as reporting to the trustee or making the certificate, but has ordered the remedy to be administered and the hospital official himself does not either contact the trustee in advance or furnish it and then present his bill either to the trustee or the patient, if the patient is able to pay, then the hospital official would also be liable.

We realize that this statement offers an uncertain and indefinite answer to what may appear to physicians as questions that can be answered categorically. But we must not overlook the fact that if cases of this kind become involved in law suits, there are many questions of fact which could be found either for or against the physician with reference to the care and diligence with which he attended his patient when considered in relation to the whole situation in which the patient was placed. The same thing can be said with regard to the liability of the official of the hospital.

If the doctor knows that the patient is financially responsible, and the hospital also knows that fact, yet the hospital refuses to furnish the anti-toxin unless the cash is paid at the time, and the patient is not in condition to handle any business, then the doctor should advise the family or others who know of the situation so that the anti-toxin will not be delayed under such an emergency. A failure to supply it under these circumstances, we believe, might render both the hospital official and the doctor liable unless the doctor had fully performed every act that could reasonably be expected from him in seeing that the remedy was supplied.

Of course, if the hospital is a private hospital which undertakes to furnish the remedies required and to perform certain services not connected with the treatment of patients admitted, the private hospital itself would be liable for failure to follow the orders of a doctor which required services or remedies from the hospital that were within the scope of the things the hospital had undertaken to do.



MEETING OF BOARD OF MEDICAL REGISTRATION AND EXAMINATION

All officers of the state board of medical registration and examination were re-elected at the board's annual meeting January 12. The officers are Dr. J. W. Bowers, of Fort Wayne, president; Dr. Leslie C. Sammon, of Shelbyville, vice-president, and Dr. William R. Davidson, of Evansville, secretary.

The board set the dates for the regular state board examinations of applicants for licenses to practice in Indiana as June 22, 23, and 24. They will be held in Indianapolis.

While in session, the board received a report from James D. Sturgis, deputy attorney general, in cases of the board against two chiropractors allegedly practicing without licenses. Mr. Sturgis reported that injunction proceedings had been filed against the two men, George L. Cole, of Carroll county, and B. E. Pitzer, of Miami county. Hearings have been started in both cases.

The petition of Benjamin T. Patton, of Terre Haute, to be reinstated was denied. His license was revoked in 1935 for alleged violation of narcotic laws.

GOVERNMENTAL EXPENDITURES FOR HEALTH

Governmental units in Indiana spent $5,390,-302.34 for health and sanitation activities during the fiscal year 1934-1935, according to a study of government costs recently completed by Albert E. Dickens, state statistician. This figure represents the expenditures for these purposes made by the state, the ninety-two counties, the civil townships, civil cities, and civil towns.

Expenditures for health and sanitation represented 3.76 per cent of the total government expenditures.

The 1934-1935 expenditures were higher, both absolutely and comparatively, than those of 1933-1934, when $4,109,743.67 was spent in connection with health and sanitation. The cost during the earlier fiscal year amounted to 3.07 per cent of the total governmental expenditure.

Mr. Dickens' study also showed that for charities, hospitals, and corrections a total of $20,329,-585.02 was spent during the 1934-1935 fiscal year. This represented 14.18 per cent of the total governmental expenditure. In 1933-1934 expenditures for this phase of government amounted to $13,-246,671.57, or 9.89 per cent of the total governmental cost.

The total of governmental expenditures for 1934-1935 was $143,406,867.74, and, for purposes of comparison with the amounts paid out for health and sanitation, and for charities, hospitals, and corrections, the percentage of the total governmental cost going to other activities follows: Education, 38.95 per cent; highways, streets, and bridges, 17.88 per cent; general government, 12.33 per cent; protection to life and property, 10.43 per cent; recreation, 1.31 per cent; conservation and development of natural resources, 0.99 per cent; and miscellaneous, 0.17 per cent.

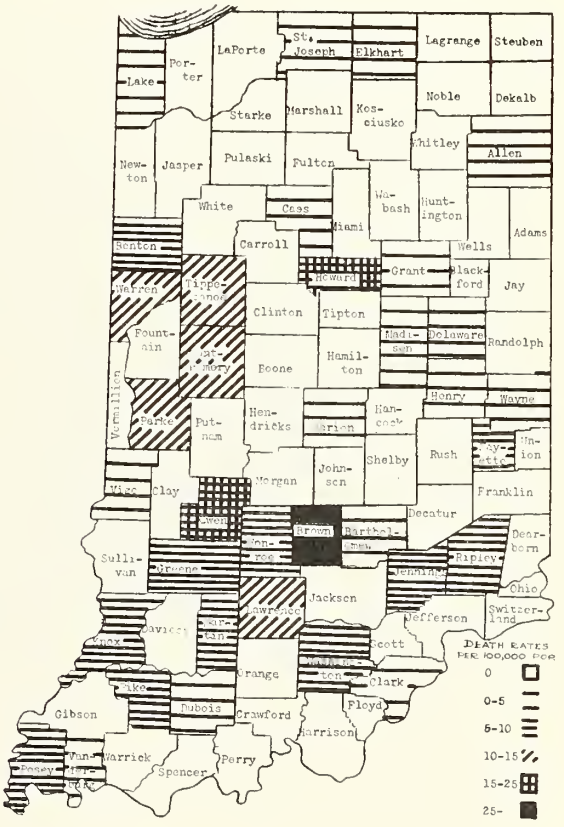
For health and sanitation, during 1934-1935, the state paid $400,439.38 for current operating expenses, and $4,483.63 for new buildings, lands, and improvements; the counties spent $1,495,671.67 for current operating expenses and $101,313.10 for new buildings, land, and improvements; the civil townships spent $39,376.59 for current operating expenses, and nothing for new buildings, lands, and improvements; the civil cities spent $2,423,315.78 for current operating expenses, and $807,437.55 for buildings, and improvements, and the civil towns spent $118,264.64 for current operating expenses and nothing for improvements.

For charities, hospitals, and corrections, during 1934-1935, the state paid $6,068,258.70 for current operating expenses and $15,996.48 for improvements; the counties paid $4,891,019.80 for current operating expenses, and $122,734 for improvements; the civil townships paid $9,047,173.41 for current operating expenses and nothing for improvements; the civil cities paid $168,036 for operating expenses and nothing for improvements, and the civil towns spent $16,365.66 for operating expenses and nothing for improvements.

DIPHTHERIA REPORT FOR 1936

Ten deaths for the month of December, 1936, and two delayed reports from earlier in the year bring the number of deaths from diphtheria for the year 1936 to 101. We very much hoped that it might fall under one hundred for the first time. Even so, we have made an excellent record, since the lowest previous year (1934) had 120 deaths. Last year there were 138.

There has been a striking decrease in deaths in the last few months; for example, ten deaths for the month of December compared with twenty-eight last year for the same month. It is interesting to note that all of the ten deaths which occurred in the month of December are in children under school age with the exception of one child who was seven years old.



Map Showing Diphtheria Death Rates in Indiana for Year 1936

Lake County had four deaths which brings the number for the year up to twelve. Posey, Fayette and Henry counties enter the list for the first time.

The number of deaths for December and for the year, also the death rates for the counties, follow:

County	No. for Dec. 1936	No. for Year 1936	Death Rate for 1936 Per 100,000 Population
Allen	1	5	3.2
Bartholomew	0	1	4.
Benton	0	1	8.
Brown	0	3	58.
Cass	0	1	2.8
Clark	0	1	3.2
Delaware	0	2	2.8
Dubois	0	1	4.8
Elkhart	0	2	2.8
Fayette	1	1	5.1
Grant	0	1	1.9
Greene	0	2	6.3
Henry	1	1	2.8
Howard	0	8	16.0
Jennings	0	1	8.5
Knox	0	3	6.0
Lake	4	12	4.3
Lawrence	0	4	10.8
Madison	0	4	5.
Marion	0	13	3.9
Martin	0	1	9.8
Monroe	0	3	7.8
Montgomery	0	4	14.8
Owen	0	1	17.6
Parke	0	2	12.0
Pike	0	1	6.1
Posey	1	1	5.6
Ripley	0	1	5.5
St. Joseph	0	3	1.1
Tippecanoe	1	5	10.3
Vanderburgh	0	4	3.4
Vigo	1	3	3.0
Warren	0	1	10.9
Washington	0	1	6.1
Wayne	0	2	3.5
	10	101	2.9

DEATHS

John Alfred Freezee, M.D., of Bunker Hill, died January sixth, aged sixty-nine years. He graduated from the Hospital College of Medicine, Louisville, in 1897.

Gilson Hild, M.D., interne at the Indianapolis Methodist Hospital, died December twenty-ninth. Dr. Hild was twenty-four years old. He graduated from the Indiana University School of Medicine in 1935.

John Chase Sexton, M.D., prominent surgeon of Rushville, died at his home there December twenty-eighth. Dr. Sexton was seventy-seven years old.

Member of a pioneer Rushville family, Dr. Sexton had resided there all his life. He attended Hanover College and the Medical College of Ohio at Cincinnati from which he graduated in 1882. He entered practice in Rushville immediately following his graduation and had remained in active practice for more than fifty years, limiting his practice to surgery. He had done postgraduate work in various medical centers in the United States and in Europe. In 1892 he built a small hospital in Rushville, and in 1902 the building was enlarged. This hospital he operated until 1928, when the building and equipment were sold to the city.

Always active in medical affairs, Dr. Sexton had served as president of the Rush County Medical Society, of the Sixth District Society and the Union District Medical Association. In 1899 he served as president of the Indiana State Medical Association, a position which his father, Dr. Marshall Sexton, had filled in 1882.

Dr. Chase Sexton held a teaching position on the staff of the Indiana University School of Medicine from 1904 to 1915.

A medical practice of more than a century in one family, beginning with Dr. Horatio Sexton, and carried on by his son, Dr. Marshall Sexton, and grandson, Dr. John Chase Sexton, is terminated with the death of Dr. John Chase Sexton.

William A. R. Wickham, M.D., of South Bend, died December twentieth, following a long illness. Dr. Wickham was seventy-six years old. He graduated from the Eclectic Medical College, of Cincinnati, in 1880, and practiced in South Bend from that time until poor health compelled him to retire.

A. F. Huddleston, M.D., of Winchester, was killed in an automobile accident near Forsythe, Georgia, December twenty-fifth. Dr. Huddleston was on his way to Florida where he intended to spend the winter with his son. He graduated from the Pulte Medical College, Cincinnati, in 1881. Dr. Huddleston was seventy-seven years old.

Clement C. Collins, of Roachdale, died December twenty-ninth, aged sixty-six years. He had practiced in Roachdale since 1894. Dr. Collins served in the medical corps of the Army during the World War. He was a member of the Putnam County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the University of Louisville School of Medicine in 1892.

HOOSIER NOTES

Mark P. Helm has been appointed registrar at the Indiana University School of Medicine to succeed Mrs. Bertha Clark who resigned recently.

Dr. Homer H. Wheeler, of Indianapolis, addressed members of the Skeleton Club, freshman medical student organization, at Bloomington, January eighth.

Dr. and Mrs. Burton D. Myers, of Bloomington, have announced the engagement of their daughter, Margaret Ann, to Dr. Standiford Helm, of Evanston, Illinois.

Dr. Morris Fishbein, editor of *The Journal of the American Medical Association*, and Dr. R. Clyde White, social psychology professor of the University of Chicago, presented a debate on socialized medicine at the Kirshbaum Center in Indianapolis, January tenth.

Dr. Wayne L. Ritter, of Indianapolis, and Miss Dorothy Merrill, of Fall River, Massachusetts, were married December twenty-ninth, in Fall River.

Vincent A. Lapenta, M.D., of Indianapolis, spoke before members of the Indianapolis Rotary Club, December fifteenth. Dr. Lapenta is Italian consul in Indianapolis.



COMMITTEES VISIT GRAVE OF JANE TODD CRAWFORD

Members of the committee of the Woman's Auxiliary of the Indiana State Medical Association and members of the Bureau of Publicity of the Association visited the grave of Jane Todd Crawford at the Johnson cemetery near Sullivan, September twenty-second. Mrs. Crawford underwent the first ovariotomy ever performed and thus has become a heroine of surgery. A memorial to Jane Todd Crawford and to the surgeon, Dr. Ephraim McDowell, of Kentucky, who performed the operation in 1809, has been erected at Danville, Kentucky. Plans are being made to erect a suitable monument at the grave of Jane Todd Crawford in Sullivan county. Those in the photograph (reading from left to right) are Mrs. J. H. Crowder, Mrs. E. D. Clark, Mrs. G. D. Scott, Mrs. O. G. Pfaff, Mrs. C. F. Briggs, Mr. Thomas A. Hendricks, Mrs. W. N. Wishard, Dr. W. N. Wishard, Dr. D. A. Pfaff, Mrs. W. N. Thompson, Dr. J. W. Woner, Dr. W. N. Thompson, and Dr. C. F. Briggs. Standing in front of the group is Miss Ann Briggs.

Fire destroyed the office building of Dr. George C. Smith at Poseyville, December twenty-third. Dr. Smith had occupied the building for forty-three years.

Miss Jeanne Lois Traugott and Dr. Frederic L. Baer, both of Indianapolis, were married December twenty-fourth.

Dr. Wayne W. Houser, of Valparaiso, has taken over the practice of Dr. R. R. Richardson at Monon. Dr. Richardson has gone to Boston.

Because of ill health, Dr. John H. Gilpin has resigned his position as superintendent of the State Soldiers' Home at Lafayette. Dr. Gilpin plans a vacation in the South. Captain Frank S. Clark, of Indianapolis, will succeed Dr. Gilpin as superintendent of the institution.

Dr. Walter L. Portteus, of Franklin, has moved into new offices in the new building erected to replace the building which burned in January, 1936. Construction of the building was begun in July.

Dr. and Mrs. W. R. Hutcheson, of Greencastle, will contribute $20,000 for the purpose of building a nurse's home at the Putnam county hospital, according to newspaper announcements. A building to accommodate twenty nurses is planned, and construction will begin as soon as the weather permits.

Henry S. Plummer, M.D., chief of the division of medicine of The Mayo Clinic since 1901, died January first. Dr. Plummer was one of the permanent staff members of the Clinic and was one of the major partners in the Mayo Foundation.

Dr. R. R. Richardson who has been practicing at Monon has gone to Boston where he will enter the Lahey clinic and will specialize in anesthesia.

Dr. and Mrs. Harley Flannigan have moved from Hobart to LaGrange where Dr. Flannigan will practice in association with Dr. Clarence H. Schultz.

Miss Henrietta Coleman, of Rushville, and Dr. Franklin S. Crockett, of Lafayette, were married January second at Lane's End, Miss Coleman's country home near Rushville.

Miss Helen Kegerreis, of Bristol, and Dr. Goethe Link, of Indianapolis, were married January first in Indianapolis. Dr. and Mrs. Link are on a motor trip through the West and will be at home after March 1 at 4207 North Pennsylvania Street in Indianapolis.

Dr. and Mrs. William N. Wishard sailed from New York, January twenty-third, to go to San Diego, California, by way of the Panama. They will return to Indianapolis about the middle of March.

Dr. Thomas J. Beasley, of Indianapolis, has been appointed to the board of trustees of the State Soldiers' Home in Lafayette. He succeeds Frank S. Clark who recently was made superintendent of the institution.

Dr. Russell Rollins has moved from Bunker Hill to Royal Center where he has taken over the practice of Dr. Walter McBeth.

Miss Ruth Pauline Luckey and Dr. Albert L. Marshall, Jr., were married December twenty-fourth in Indianapolis.

The International Hospital Association will hold its 1937 sessions in Paris, July 6th to 11th. The meetings will be held at Paris and will include visits to some of the large hospitals, the Cancer Institute, and principal agencies engaged in Public Health work. Information concerning the meeting may be obtained by writing M. Chenevier, No. 3 Avenue Victoria, Paris IV, France.

The postgraduate institute of the Philadelphia County Medical Society will be held April 12 to 16th in Philadelphia and will be open to all physicians who are members of their local societies. A registration fee of $5 will be charged. The subject "Diseases of the Chest and Upper Respiratory Tract" will be discussed by fifty teachers.

The next meeting of the Muncie Academy of Medicine will be held February ninth, with Dr. Russel Hayden, of the Cleveland Clinic, as principal speaker. Dr. Hayden will present a paper on "The Diagnosis and Treatment of Anemia." All interested members of the profession are invited to attend. This will be a dinner meeting at six-thirty at the Hotel Roberts.

The Indiana Association of Clinical Pathologists held a meeting at the Indiana Medical Center in Indianapolis, December 28 and later met with the Society of American Bacteriologists which was holding its thirty-eighth annual session. Officers of the Indiana pathologists are Dr. M. W. Lyon, Jr., president; Dr. F. P. Hunter, vice-president, and Dr. Clyde G. Culbertson, secretary-treasurer. The next meeting of the pathologists will be held in Lafayette within the next few months. A definite date will be decided upon later.

A new x-ray laboratory building has been erected at Healthwin hospital, South Bend, and new equipment has been installed recently. The building is 26 by 40 feet, and follows the architectural trends of the other buildings on the hospital grounds. Funds for its erection were obtained through the will of a benefactor.

INDIANA UNIVERSITY NEWS NOTES

Dr. H. H. Wheeler, assistant professor of surgery at the Indiana University School of Medicine in Indianapolis, spoke before members of the Skeleton club, an organization of freshman medical students in the Bloomington division of the I. U. school of medicine, Friday, January 8. The meeting was sponsored by the Phi Beta Pi professional medical fraternity.

The fourth annual mid-winter meeting of Indiana dentists was held Monday, January 11, at the Indiana university dental school in Indianapolis. An attendance of between 500 and 600 dentists was registered.

Clinics, exhibits and afternoon lectures were presented at the dental school. A dinner meeting was held at the Indianapolis Athletic Club, for the dentists and their wives, with Coach Bo McMillen of Indiana university as the principal speaker.

Impressions of pioneer dentistry in Indiana were conveyed through a historical exhibit featuring the use of the old-fashioned fiddle bow and finger drills. Equipment of the late Dr. James English, who practiced many years ago in Worthington, Ind., was shown. Most of it was made by Dr. English, himself. The equipment was presented to the I. U. dental school by his son, Dr. Ray English, of Clay City.

The children's dental research laboratory, which was equipped about a year ago by the U. S. Public Health Service to serve as one of the units in the Federal government's fight on dental diseases of children, was opened for the visiting dentists. Research laboratories in histology and pathology also were shown for the first time.

Lecturers and clinical demonstrators for the state meeting included the following: Dr. Harold T. Dailey, South Bend; Dr. Bernard Martin, Dr. James B. Carr, Dr. Earl S. Gilchrist, Dr. Arthur E. Denison, and Dr. Herbert W. Mason, Indianapolis; Dr. Noble G. Wills, Connersville; Dr. Newton M. Campbell, Gary, and Dr. Virgil Longcamp, Aurora.

The committee in charge included the following: Dr. H. H. Nagle, Indianapolis, general chairman; Dr. R. F. Benham, president, and Dr. H. C. Percival, secretary, of the Indianapolis Dental Society; Dr. V. H. Hilgemann, Fort Wayne, president, and Dr. Gerald D. Timmons, secretary, I. U. Dental Alumni Association. The meeting was sponsored by the Indianapolis Dental Society and the I. U. Dental Alumni Association.

Appointment of Mark P. Helm as registrar at the Indiana University School of Medicine in Indianapolis has been announced. He succeeds Mrs. Bertha Clark, who has resigned after ten years as clerk in the registrar's office and for a number of years as registrar.

Miss Mary O'Connor was appointed secretary to Dean W. D. Gatch of the medical school. She has been a member of the medical center staff for the past six years as medical stenographer in the records department. Miss Dorothea Collins, chief clerk in the business office at the Indianapolis Y. W. C. A., takes the position of clerk in the registrar's office. Miss O'Connor is a graduate of St. John's Academy and Miss Collins is a graduate of Ball State Teachers' College.

Mr. Helm is a graduate of I. U. with the class of 1894. A native of Muncie, he was connected for five years with the Ball Brothers glass manufacturing company at Muncie and Marion and in Pueblo, Colo.

The new I. U. registrar at the medical school has been connected with the medical center at Indianapolis for a number of years. Prior to his appointment as registrar he held the position of supervisor of student work. Mr. Helm is a member and former officer of the Indiana University Club of Indianapolis. He is an "I" man and was one of a group honored at the homecoming banquet in Bloomington last fall for his services to Indiana athletics. Mr. Helm is a prominent alumnus of the Phi Kappa Psi fraternity.

INDIANA STATE MEDICAL ASSOCIATION

THE COUNCIL

The annual midwinter meeting of the Council of the Indiana State Medical Association was called to order by Dr. O. O. Alexander, of Terre Haute, chairman, at 11:00 a. m., Sunday, January 17, 1937, in Private Dining Room No. 1, Columbia Club, Indianapolis. Roll call showed the following present:

Members of the Council:

First District—I. C. Barclay, Evansville.
Second District—H. C. Wadsworth, Washington.
Third District—H. C. Ragsdale, Bedford.
Fourth District—M. C. McKain, Columbus.
Fifth District—O. O. Alexander, Terre Haute.
Sixth District—Samuel Kennedy, Shelbyville.
Seventh District—C. J. Clark, Indianapolis.
Eighth District—M. A. Austin, Anderson.
Ninth District—F. T. Romberger, Lafayette.
Tenth District—N. K. Forster, Hammond.
Eleventh District—Not represented.*
Twelfth District—E. M. VanBuskirk, Fort Wayne.
Thirteenth District—W. B. Christophel, Mishawaka.

(* Dr. Ira Perry of North Manchester, councilor of the Eleventh District, telephoned that he was unable to get to Indianapolis on account of the icy condition of the roads.)

Officers:

R. L. Sensenich, president 1936.
E. D. Clark, president 1937.
H. M. Baker, president-elect.
A. F. Weyerbacher, treasurer.
E. M. Shanklin, editor of THE JOURNAL.
T. A. Hendricks, executive secretary.

As the minutes of the October, 1936, meetings of the Council in South Bend were approved as printed in the November JOURNAL, on motion, duly seconded and carried, these minutes were not read.

The chairman called attention to the poor representation that some county societies have at the annual meetings of the House of Delegates. He suggested that each councilor make it his responsibility to contact each county society in his district, find out who have been elected delegates and then get in touch with the delegates by telephone and ascertain whether or not they are planning to attend the annual session, and if not, who will take their places.

The Chairman: I think in that way we might increase the attendance in delegates at the meetings. It is very difficult for the president to appoint his reference committees if at the first meeting so few delegates are present.

Dr. Shanklin: On this point I have some observations I have made over a good many years. I don't know how it is in other counties. Of the delegates and alternates nominated and elected, at least half of them are pick-ups. Someone sitting next to someone else hands in his name. . . . It is absolutely wrong to elect delegates in December for October. We are seriously considering taking care of the election of the delegates to the state convention in September.

The Chairman: The names of delegates have to be in headquarters office by June first.

Dr. Wadsworth: We instituted in our district last year, before the district meeting, a short informal meeting of the presidents and the secretaries of the various county societies. This meeting was pretty well attended. It appears that that is going to do more for our annual district meeting, and it has been suggested that we have a similar informal meeting shortly before the state meeting to talk over local conditions and local desires in relation to the state medical society. When it comes to appointing the delegates in our local society in June it just isn't done. We have voted our president authority to handle that as an individual, and he sees that the delegates are there. One or two of our counties elected their delegates last June and they didn't have any delegates up to South Bend. No use in electing someone who won't be there.

The Chairman: It does seem to me that the councilor is the ideal man to see that we have an attendance in the House of Delegates and I think it is vitally important that we do have a rather full representation at the first meeting. I know how difficult it is for the president to select these reference committees. I think it is highly essential and it does seem to me that the councilor is the key man to look after that.

Dr. Romberger: I quite agree with your remarks about the councilor being the key man. The whole thing goes back to the matter of electing men who are interested in the state organization. I contact nearly all my delegates prior to the state meeting by attending their county meetings. We have a fair representation. . . . If we could adopt some method to speed up our meetings, especially the first meeting, it would help. Fundamentally and basically the quality of the meeting you hold at your annual session is going to depend entirely upon the esprit de corps of the members that make up your House of Delegates.

The Chairman: One thing that holds up the first meeting of the House of Delegates is the appointment of the reference committees. If the delegates were registered the chairmen of these committees could be arranged for before the meeting and then this matter could be taken care of in fifteen minutes.

Dr. Christophel: I think Dr. Romberger made a very good statement when he said someone should be elected who really takes an interest. . . . If they do give good service and they do attend they should be elected year after year with the idea that they are markedly more valuable in the House of Delegates.

Dr. Sensenich: You must remember that the reference committees of the House of Delegates consider and define the basis upon which the House carries on its legislative activities. A man should take his election as a delegate seriously. He should be contacted and notified that he is expected to be present.

Dr. Romberger: I believe that each councilor during this present year, sometime or other, probably will visit every county society in his district and, in his talk, he can get up and say that at the midwinter meeting this matter was brought up and discussed. . . . Your House of Delegates is not one whit better than the men who sit in it. Your older men should take your younger men and break them in—take a young fellow and give him some responsibility.

The Chairman: Regarding the personnel of the Council. The more you see of the workings of the Indiana State Medical Association, the more you familiarize yourself with the Constitution and By-Laws, you see that this body here, the Council, is the all-powerful body in the organization. In times past in the midwinter meeting we have had each of the committee chairmen report to the Council. As a rule it makes a long, drawn-out meeting. Since the Council is the governing body, it strikes me that the councilors should be familiar with the workings of the committees. . . . That works both ways. It stimulates the interest of the council and the interest of the committees is stimulated. This is the governing body, absolutely. We are entrusted with the editing of THE JOURNAL; we elect the editorial board; we enter into the contract for the printing of THE JOURNAL, and we are the House of Delegates when the House of Delegates is not in session. So that it becomes all important that the councilors themselves be good men, and as Dr. Romberger says in reference to the House of Delegates, your Council is just as good as your councilors make it. . . . If a councilor is a good councilor, I think it is important that he be continued in the Council.

REPORTS OF COUNCILORS BY DISTRICTS

First District—Barclay. The only thing of moment that I have to say is that the First District Medical Society is proud that the president-elect of the Indiana State Medical Association, Dr. Baker, is a member of the first district.

Second District—Wadsworth. It is encouraging in our district to find that the young men coming into the district all are taking interest in organized medicine. In my own society, Daviess-Martin, all of the young men in the county were taken into membership at our December meeting and I think that is practically the condition in all of the other counties.

It is just a little bit interesting to note over the district that the improved economic status of our physicians during the last year has been almost unanimously followed by a lack of interest in the economic problems affecting the physicians.

Third District—Ragsdale. For the past two years our third district has been interested in state medicine and we have made some little investigation along that line. We find we already have state medicine—not in great measure.

One thing we have to contend with is the Indiana University Medical Center. Many patients go there who are well able to pay in their home ciites—due to the fault of the trustee who sends them there, due to carelessness of the physician, and due to carelessness of the hospital in admitting patients without having social service look them up. Some patients who go from our county are worth thirty thousand dollars. Another thing is poor relief. Fees have been cut so drastically that as a result everyone knows how much the poor are paying. . . . Other things are: social security, the Resettlement Administration, free tuberculosis clinics for pay patients, free venereal clinics, free diphtheria immunization, and the new state board of health staff. The propaganda which that staff puts out is really socialistic in character.

Fourth District—McKain. The fourth district is a pretty healthy district at the present time. The only unorganized county in the state is in that district but I don't believe it is possible to organize it at this time.

Fifth District—Alexander. Nothing much to report from the fifth district. Our component societies all are flourishing. I think we have about a 100 per cent membership. Much of the credit is due to the secretary of our Vigo County Medical Society which is by far the largest society in the district. He sets a standard and the other societies in the district attempt to follow it as nearly as they can.

Sixth District—Kennedy. Nothing special to report.

Seventh District—C. J. Clark. Everything is running very smoothly in our district. At our last meeting we adopted a constitution and by-laws and elected our officers and had quite a well attended meeting, at which time we were grateful to have Dr. McKain and some representatives from Dr. Kennedy's district present.

Eighth District—Austin. Too many medical meetings in any community always lessens the interest of the Profession and too frequent doses of even the most valuable medicines soon lose their value. The change from weekly to monthly meetings of the Muncie Academy of Medicine will work to the advantage of the entire District and bring up the attendance to what the talent they have should expect. The Couny Societies in the District are all functioning in good shape. Good papers, good attendance and a better feeling in general due to the temporary improved economic conditions.

Ninth District—Romberger. The ninth district is well organized as far as organized medicine is concerned and everything is moving along in ship shape. The next district meeting will be held May 18, 1937, at Crawfordsville.

Tenth District—Forster. Regarding the affairs of the district generally I think they can be reported as good. However, there is one matter which is concerning us, namely, the question of advertising chiropractors and their associates, which I should like to bring before the Council later on in the meeting for its consideration.

(Dr. Forster reported upon the tenth district meeting. Report published in this issue of THE JOURNAL.) In the future, this district will hold a spring meeting, in April of each year. The next meeting will be held in Gary, April 8, 1937.

Twelfth District—VanBuskirk. Nothing to report.

Thirteenth District—Christophel. We believe that you were happy at South Bend at the state meeting, and we still are very grateful that a year ago at this Council meeting you were so gracious as to aid us in a financial proposition. Many of the men of course did a lot of hard work but at the end there was no financial embarrassment and we up there sort of believe that it is a very good unwritten law and henceforth that it might be well to underwrite from a financial standpoint other meetings and thereby not embarrass any one county society for the expense of an annual meeting.

The Chairman: That brings up a point in reference to the Council allocating funds for entertainment. The amount to be allocated is stipulated in the by-laws. The first revision of the by-laws recommended even a reduction in that amount. There never has been any doubt in my mind but what the Indiana State Medical Association should withstand the entire expense of entertainment. It doesn't seem right to force a financial burden upon the local members of the meeting place in addition to the time that they give. That is a point which maybe we should have Mr. Stump's opinion upon.

REPORTS OF OFFICERS

Dr. R. L. Sensenich, 1936 president, thanked the Council for its support during his term in the office of president and emphasized the remarks of Dr. Alexander regarding the importance of the Council, saying the Council is comparable to the Board of Trustees of the American Medical Association. "You are the people who are really responsible for the conduct of the State Association."

He thanked the Council for underwriting of additional funds for the South Bend session and for the appropriation which made possible a successful graduate education course in 1936.

Dr. Sensenich discussed the following points regarding the elevation of standards of medical work which were covered in his annual report to the House of Delegates in October:

1. More effective organization of graduate study in county societies, also in a state program.
2. Encouragement of members to individual study, investigation, and presentation of their work before county medical societies.
3. Improved diagnostic laboratory facilities for rural areas.

Regarding postgraduate work Dr. Sensenich said, "I personally doubt whether it is a good plan to accept federal money. It is my idea that this Council should appropriate funds with which to carry on postgraduate work—at least one large central meeting of two days' duration. The Indiana University School of Medicine last year cooperated in carrying on the program for the meeting held in Indianapolis, and I believe this relation should be continued. I personally have always been in favor of a small registration fee. Experience has shown that universities cannot conduct a graduate program and excite the enthusiasm necessary to success as the State Association can. The university cannot go out in the state and hold meetings. The State Association through the Council is responsible for the graduate education to be given. That work must be carried on and it should be broadened. It should be carried into the district and local societies. It comes back to the councilors to organize these activities in the districts."

Dr. E. D. Clark, president. "I was especially interested in the discussion of Dr. Sensenich. I have appointed all committees except the Committee on Graduate Education and this morning we effected a plan which will make it possible to appoint that committee within the next two days. I think that I have an excellent lot of committees. I have consulted with every councilor and taken his advice in appointing these committees. Graduate education is probably the most important thing we have before us. I can see no reason why we shouldn't use outside funds to help us on our postgraduate education. We have available in Indiana this year a sum for that work, which is appropriated through the Child Welfare Bureau. If it isn't used it will go back into the treasury. At least this is a matter for consideration."

Dr. A. F. Weyerbacher, treasurer, summarized the following annual financial report which was made by the George S. Olive and Company, certified public accountants:

TREASURER'S REPORT

January 7, 1937.

The Council,
Indiana State Medical Association,
Indianapolis, Ind.

Gentlemen:

We have examined the cash records of your Association for the year ended December 31, 1936. This examination was undertaken for the purpose of determining and verifying the cash transactions for the year.

The results of our examinations are presented in this report, which includes (1) text of comments; (2) statement of assets of all funds at December 31, 1936; (3) statements of receipts and disbursements of all funds for the year ended December 31, 1936.

General Comments

In exhibit A is presented an analysis of the increase in assets of the Association for the year ended December 31, 1936, showing in summary form the sources from which this increase was derived.

Details of the assets of all funds are presented in exhibit B.

Details of the receipts and disbursements of cash in the general fund, THE JOURNAL of the Indiana State Medical Association, and the medical defense fund are presented in exhibits C, D, and E.

Yours very truly,
GEORGE S. OLIVE & CO.,
Certified Public Accountants.

INDIANA STATE MEDICAL ASSOCIATION

List of Statements Contained in Report on Examination of Cash Records, Year Ended December 31, 1936

Exhibit A—Analysis of increase in assets, all funds, year ended December 31, 1936.

Exhibit B—Statement of assets, all funds, at December 31, 1936.

Exhibit C—Comparative statement of cash receipts and disbursements of the general fund, years ended December 31, 1936, and December 31, 1935.

Exhibit D—Statement of cash receipts and disbursements of **The Journal** of the Indiana State Medical Association, year ended December 31, 1936.

Exhibit E—Statement of cash receipts and disbursements of the medical defense fund, year ended December 31, 1936.

Exhibit A

Analysis of Increase in Assets, All Funds, Year Ended December 31, 1936

TOTAL ASSETS, DECEMBER 31, 1936—exhibit B		$42,692.91
TOTAL ASSETS, DECEMBER 31, 1935		39,457.84
NET INCREASE		3,235.07
Arising from the following sources:		
Excess of cash receipts over disbursements—general fund, year ended December 31, 1936—exhibit C	$2,560.25	
Excess of cash receipts over disbursements—JOURNAL of the Indiana State Medical Association, year ended December 31, 1936	154.82	
Excess of cash receipts over disbursements—medical defense fund, year ended December 31, 1936	540.00	
	$3,255.07	
Less: Reduction of investment (Rokeby Apartment Hotel, Chicago)	20.00	
Total net increase		$ 3,235.07

Exhibit B

Statement of Assets, All Funds, at December 31, 1936

GENERAL FUND:		
Cash on deposit—exhibit C	$5,088.79	
Petty cash fund	200.00	
Investments:		
Ft. Wayne, Indiana, School Improvement bonds	3,000.00	
Lake County Indiana, State Highway Aid bonds	2,000.00	
Marion County, Indiana, Flood Prevention bonds	3,000.00	
Indianapolis City Hospital bonds	5,000.00	
United States Treasury bonds	5,000.00	
Beachton Court Apartments, Chicago—bonds evidenced by certificates of deposit	4,000.00	
Rokeby Apartment Hotel, Chicago—bond evidenced by certificate of deposit	980.00	
Total general fund assets		$28,268.79
JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION:		
Cash on deposit—exhibit D		2,591.16
MEDICAL DEFENSE FUND:		
Cash on deposit—exhibit E	1,832.96	
Investments:		
Ft. Wayne, Indiana, School Improvement bonds	2,000.00	
Marion County, Indiana, Flood Prevention bonds	2,000.00	
Indianapolis City Hospital bond	1,000.00	
United States Treasury bonds	5,000.00	
Total medical defense fund assets		11,832.96
TOTAL ASSETS—ALL FUNDS—exhibit A		$42,692.91

Exhibit C

Comparative Statement of Cash Receipts and Disbursements, Years Ended December 31, 1936, and December 31, 1935

GENERAL FUND

	Year Ended		
	Dec. 31, 1936	*Dec. 31, 1935*	*Increase —Decrease*
Balance, Beginning of Year	$ 2,528.54	$ 5,313.13	—$2,784.59
Receipts:			
Membership dues	19,733.00	19,470.00	263.00
Income from exhibits	3,467.50	1,950.00	1,517.50
Postgraduate study	———	74.84	—74.84
Rokeby Liquidation Trust Distribution	20.00	———	20.00
Interest income:			
United States Government bonds	311.25	317.65	—6.40
Indianapolis, Indiana, City Hospital bonds	247.50	247.50	———
Marion County, Indiana, Flood Prevention bonds	212.50	212.50	———
Ft. Wayne, Indiana, School Improvement bonds	225.00	225.00	———

Lake County, Indiana, State Highway Aid Bonds	100.00	100.00	———
Total receipts	24,316.75	22,597.49	1,719,26
Beginning Balance Plus Cash Receipts	26,845.29	27,910.62	—1,065.33
Disbursements:			
Transfers of applicable portion of dues to:			
THE JOURNAL of the Indiana State Medical Association—exhibit D	5,678.00	5,602.00	76.00
Medical defense fund—exhibit E	2,108.25	2,081.25	27.00
Headquarters office expense	8,670.27	8,535.06	135.21
Publicity committee	337.85	260.70	77.15
Public policy	541.23	429.15	112.08
Council	122.91	110.85	12.06
Officers	603.29	491.17	112.12
Annual session	2,678.39	1,805.01	873.38
Miscellaneous committees	634.54	787.99	—153.45
Postgraduate study	381.77	6.90	374.87
Premium and accrued interest on purchase of United States Treasury bonds	———	272.00	—272.00
Total disbursements	21,756.50	20,382.08	1,374.42
	5,088.79	7,528.54	—2,439.75
Deduct: Disbursement for United States Treasury bonds	———	5,000.00	—5,000.00
CASH BALANCE, END OF YEAR	$ 5,088.79	$ 2,528.54	$ 2,560.25
	(Exhibit B)		(Exhibit A)

Exhibit D

Statement of Cash Receipts and Disbursements, Year Ended December 31, 1936

JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

BALANCE, January 1, 1936		$ 2,436.34
RECEIPTS:		
Subscriptions—members—exhibit C	$5,678.00	
Subscriptions—non-members	93.50	
Advertising	9,730.92	
Collections on accounts receivable	333.50	
Single copy sales	20.86	
Electrotypes	111.18	
Total receipts		15,967.96
		18,404.30
DISBURSEMENTS:		
Editorial and management salaries	6,377.50	
Printing	6,451.30	
Postage	550.54	
Electrotypes	538.33	
Office rent and light	732.09	
Office supplies	436.19	
Press Clippings	97.94	
Extras—help and printing	428.28	
Convention reporter	170.65	
Miscellaneous	30.32	
Total disbursements		15,813.14
BALANCE, DECEMBER 31, 1936—exhibit B		$ 2,591.16

Exhibit E

Statement of Cash Receipts and Disbursements, Year Ended December 31, 1936

MEDICAL DEFENSE FUND

BALANCE, JANUARY 1, 1936		$ 1,292.96
RECEIPTS:		
Transfer of applicable portion of dues from general fund—exhibit C		2,108.25
		3,401.21
DISBURSEMENTS:		
Attorney's retainer fee	$ 600.00	
Malpractice fees	953.25	
Treasurer's bond	15.00	
		1,568.25
BALANCE, DECEMBER 31, 1936—exhibit B		$ 1,832.96

Dr. E. M. Shanklin, editor of THE JOURNAL. "The JOURNAL report as you know has been mailed to you each month during the past year. . . . The plans for the current year include probably two special numbers, one in March to be known as the Venereal Disease Control number, and an historical number in May, in addition to the special number which we plan for the French Lick session next fall. . . . Our advertising income for last year showed an increase which you will notice in the treasurer's report. Notwithstanding the fact that our printing bill is larger than ever in the history of THE JOURNAL, we still are using black ink. . . . The Editorial Board has again justified its existence, showing the wisdom of the Council in providing for an editorial board in addition to the editor of THE JOURNAL. . . . I think the greatest compliment we had on THE JOURNAL during the last year was from Kentucky. The business manager of the Kentucky State Medical *Journal* wrote in to say that he had had an exhibit of all state journals and the Indiana JOURNAL had attracted the most attention of all the journals there."

After discussion of the matter of allowing commercial companies to send out reprints from THE JOURNAL of the Indiana State Medical Association, Dr. Romberger made the following motion which was seconded and carried unanimously:

"I move that the Council instruct the editorial board and the publisher, in approving requests for reprints in volume, that each case shall be judged upon its merit as to whether or not the reprint is to be used for scientific purposes, for the dissemination of knowledge to the practitioners of medicine; the reprint shall be devoid of advertising of any and whatsoever character, and proper credit shall be given to the author, all this with the consent of the author."

UNFINISHED BUSINESS

1. Dr. Christophel reported that the Starke County Medical Society had been reorganized with five physicians out of seven paying 1937 dues.

2. Dr. Wadsworth moved that the matters regarding Owen and Greene counties be considered closed. This motion was seconded by Dr. Ragsdale, and carried.

SUGGESTIONS AND PROPOSALS FOR 1937 AT FRENCH LICK

1. The dates set by the Executive Committee upon direction of the Council, Monday, Tuesday, and Wednesday, October 4, 5, and 6, 1937, were approved by the Council.

2. **General outline of suggested Program:**

Monday, October 4, 1937

Morning— Registration
Golf, trap shooting and other sports.

Afternoon—Council meeting
Meeting of House of Delegates
Golf continued

Evening— Smoker and stag party

Tuesday, October 5, 1937

Morning— Scientific meetings
Noon— Class and fraternity get-togethers and luncheons
Afternoon—Scientific meetings
Evening— Annual banquet or meeting for lay public

Wednesday, October 6, 1937

Morning— Final meeting of House of Delegates and Council
Final scientific meeting
Noon— Adjournment.

Dr. Romberger moved the adoption of the tentative program; motion seconded and carried.

Dr. Romberger made the motion that the general policy as carried out in the past two or three years of having the general meeting confined to outstate speakers and the section programs made up of Indiana men be continued. Motion seconded and carried unanimously.

3. **Convention facilities for 1937.** Report written by Dr. George Dillinger, chairman of the General Arrangements Committee, was presented to the Council.

4. **Scientific exhibit.** Dr. C. J. Clark moved that the scientific exhibit be continued. Motion seconded by Dr. Forster and carried.

5. **Employment of professional medical stenographers.** Dr. Christophel moved that the employment of professional medical stenographers be continued. Motion seconded and carried.

Dr. C. J. Clark: I would like to say that the money mentioned by Dr. Clark and Dr. Sensenich isn't confined to use by the State Association. You men can go to the State Board and secure a certain amount of funds for your councilor districts. (Dr. Harvey stated that the subjects discussed should be confined to child welfare as nearly as possible.)

LUNCHEON

The Council recessed for luncheon in Private Dining Room No. 2 of the Columbia Club.

The following guests and committee chairmen, or members, were present and gave brief reports on the activities of their offices:

Dr. C. A. Nafe, chairman, Executive Committee. ". . . We have tried to conduct the problems that have been presented to the Executive Committee as this Council and the members of the profession which you represent would wish us to handle them. . . . As we see it now, there are two major problems that are confronting the Executive Committee and the Council: (1) The legislative problems, and (2) the ever-present economic problems of the physicians, such as the Economy plan, and the Resettlement Administration. . . . The Resettlement Administration has these clients that nobody else wants. They try to get medical service for these people at something these people can pay. They are wanting to cooperate with the State Medical Association and the local doctors in getting some plan so that these clients of theirs can get medical attention and can pay something for it. Mr. Hays and Dr. Williams of the Resettlement Administration will attend the Secretaries' Conference and discuss these problems. After that conference the Executive Committee hopes to have a plan which it can suggest to the local communities in dealing with this situation.

"I am sure that the members of the Committee would be very glad to answer any question and certainly would be glad to receive any instructions from the Council."

Dr. H. H. Wheeler, member of the Executive Committee, presented his resignation and expressed his appreciation for the confidence placed in him by the Council during the years that he served on the Executive Committee. As the activities of this committee are very exacting and time-consuming, he said he felt a younger man should take his position.

Dr. Verne K. Harvey, director of the State Division of Public Health. We have enjoyed the finest relationsbip with the State Association headquarters office and we want to do everything in our power to see that this relationship continues.

Dr. W. D. Gatch, dean, Indiana University School of Medicine, Indianapolis. "I feel honored to be invited to this important meeting and wish to extend to you my best wishes for the success of your work. I have a couple of thoughts I would like to report to you about medical education in general and the situation here in particular. There is a fear, which I shared at one time, that the medical schools are turning out too many doctors. I have ceased to worry about that. Every member of our present senior class has secured an internship, and I am now receiving letters from Fort Wayne, South Bend, Hammond, all over the state, begging me for interns. Our state institutions are constantly asking for men. I am convinced from this experience that we are not turning out any more doctors than we need.

"The whole question of medical education is somewhat an amazing one. Despite the fact that it takes eight years to get a medical education, with four years more for any special work, the number of applicants seems to be undiminished. The most urgent problem that I have to face may not have occurred to you." (Here Dr. Gatch spoke of the scarcity of residencies for young men who wish to fit themselves for one of the specialties and receive adequate training.) "That is a great need, it seems to me, now in medical education.

"I think all the health agencies in Indiana, the State Board of Health, the State Medical Association, and the Medical School, should work together for a common cause. There is no reason for disharmony among any of these. No petty differences should interfere. We are enlisted in a common cause and we should stand shoulder to shoulder in it. I think our relations are satisfactory and I hope they may always continue to be so. So I conclude, as I began, by wishing you well."

Mr. Albert Stump, attorney for the State Association, reported that the amount of malpractice work in the office of the attorney had not increased during the past few years, though he had information from attorneys of other state medical associations that the number of malpractice suits in their states is greatly increasing. "The fact that these suits have not increased in Indiana is due to the cooperation of the doctors in getting the scientific facts before the juries."

Dr. H. G. Hamer, delegate to the American Medical Association, referred to the report of the delegates to the A.M.A. which was printed in the June, 1936, issue of THE JOURNAL. He called special attention, however, to the following points: (1) Complaint emanating from the Farm Bureau relative to the fees doctors were charging in some localities. "These fees were based upon the old system of mileage dating back to the horse and buggy days. House of Delegates recommended that it be brought to the attention of state and county medical societies. . . . It occurs to me that this is a matter of some importance." (2) The birth control resolution, and (3) the recommendation that a provision be made for dealing with unethical standards in local societies. "The chairman of the Judicial Council presented a proposed amendment to the by-laws, giving the Judicial Council authority to request the president to appoint investigating juries to which it may refer complaints or evidences of unethical conduct which in its judgment was of greater than local concern. So many times when a case occurs in a local community, there is reluctance on the part of the local profession to take action. It was the thought that if there was machinery provided whereby these cases could be referred to the Judicial Council they could be handled better. I have enjoyed being one of the state's representatives to the A.M.A. and appreciate the honor."

Dr. N. M. Beatty, chairman of the Legislative Committee, presented the following resolution which was adopted unanimously upon the motion of Dr. C. J. Clark:

"Recognizing the desirability that all activities of the Federal government having to do with the promotion of health and the prevention of disease might with advantage

be consolidated in one department under one head, the Council of the Indiana State Medical Association would recommend that such health activities as now exist be so consolidated in a single department which would not, however, be subservient to any charitable, conservatory or other governmental interest.

"This reorganization and consolidation of medical departments need not, under present circumstances, involve any expansion or extension of governmental health activities but should serve actually to consolidate and thus eliminate such duplications as exist.

"It is also the view of the Council that the supervision and direction of such medical or health department should be in the hands of a competently trained physician, experienced in executive administration."

Dr. A. M. Mitchell, chairman of the Secretaries' Conference, called attention to the program for the Secretaries' Conference on Sunday, January 31, which is carried in the January JOURNAL. He asked that the councilors urge their county society officers and legislative committeemen to be present at this conference.

EXECUTIVE SESSION FOLLOWING LUNCHEON
MEMBERSHIP PROBLEMS

1. **Membership Report by Districts.**

December 31, 1936

County Society	*No. M. D.s in County	Members Dec. 31, 1936	Members Dec. 31, 1935	Loss-Gain	Eligible Non-Members	New Members	Removed and Retired	Deceased	Ineligible
1st District									
Posey	22	13	13	...	3	...	4	...	2
Vanderburgh	175	110	104	6	41	9	16	6	3
Warrick	21	7	7	...	9	1	3	2	...
Spencer	19	11	8	3	5	1	3	...	1
Perry	14	9	9	...	5	...	...	1	...
Gibson	32	24	24	...	2	1	6	...	...
Pike	11	5	6	—1	5	...	...	...	1
Total	294	179	171	8	70	12	32	9	7
2nd District									
Knox	63	36	35	1	19	2	7	...	4
*Daviess-Martin	34	22	23	—1	9	1	2	1	1
Sullivan	26	22	22	...	1	...	2	1	1
Greene	22	16	16	...	6	...	...	...	...
Owen	13	7	8	—1	6	...	...	...	...
Monroe	41	36	34	2	4	3	...	1	2
Total	199	139	138	1	45	6	11	3	8
3rd District									
Lawrence	29	23	23	...	...	1	6	1	...
Orange	22	16	15	1	3	1	3	...	...
Crawford	9	3	3	...	6	...	...	...	...
Washington	12	8	8	...	2	...	1	1	1
Scott	9	3	4	—1	1	...	4	...	1
Clark	28	15	16	—1	11	...	2	...	...
*Floyd	48	35	38	—3	3	1	6	1	3
Harrison	10	8	5	3	2	1	...	...	...
Dubois	24	14	14	...	7	...	2	1	...
Total	191	125	126	—1	35	4	24	4	5
4th District									
*Brown	4	...	...	...	2	...	...	...	2
*Bartholomew	33	25	25	...	3	1	2	...	3
Decatur	26	18	17	1	5	1	3	...	...
Jackson	24	16	16	...	5	2	3	...	2
Jennings	10	8	7	1	...	...	2	...	...
*Ripley	18	13	12	1	3	2	1	...	1
Jefferson	29	21	20	1	3	2	4	1	...
Switzerland	7	6	6	...	...	...	1	...	...
Dearborn-Ohio	25	15	16	—1	1	...	4	...	5
Total	176	122	119	3	22	8	20	1	13
5th District									
Parke-Vermillion	40	26	26	...	8	...	4	...	2
*Putnam	19	17	16	1	1	2	...	...	1
Vigo	127	114	114	...	2	3	5	2	6
Clay	22	12	11	1	7	...	...	1	2
Total	208	169	167	2	18	5	9	3	11
6th District									
*Hancock	20	18	18	...	...	...	2	...	...
*Henry	40	33	36	—3	3	...	2	...	2
Wayne-Union	83	53	54	—1	13	1	4	3	10
Rush	26	20	19	1	3	...	...	2	1
Fayette-Franklin	30	22	21	1	3	1	3	1	2
Shelby	35	21	23	—2	7	...	5	2	...
Total	234	167	171	—4	29	2	16	8	15
7th District									
*Hendricks	29	19	19	...	4	1	2	1	3
Marion	798	516	484	32	212	23	30	15	42
Morgan	33	18	17	1	9	1	5	1	...
Johnson	26	12	7	5	11	3	1	1	1
Total	886	565	527	38	236	28	38	18	46
8th District									
Madison	98	70	69	1	13	2	9	2	4
*Delaware-Blackford	103	75	66	9	20	5	4	1	3
*Jay	23	14	15	—1	8	...	1	...	...
*Randolph	28	20	22	—2	2	1	5	1	...
Total	252	179	172	7	43	8	19	4	7
9th District									
Benton	17	15	14	1	...	1	...	...	2
*Fountain-Warren	24	18	19	—1	3	1	1	1	1
*Tippecanoe	92	82	83	—1	5	...	3	4	1
Montgomery	49	31	30	1	4	2	12	4	...
*Clinton	36	22	22	...	5	...	3	3	3
Tipton	18	10	10	...	5	...	2	1	...
*Boone	24	14	15	—1	8	...	1	1	1
Hamilton	29	19	21	—2	2	1	5	1	2
White	21	4	3	1	14	1	3	1	1
Total	310	215	217	—2	46	6	30	16	11
10th District									
*Lake	266	187	197	—10	63	14	10	4	6
Porter	28	21	20	1	4	1	2	2	...
Jasper-Newton	29	14	13	1	9	2	5	2	...
Total	323	222	230	—8	76	17	17	8	6
11th District									
Carroll	21	17	21	—4	...	1	3	1	1
Cass	52	34	38	—4	11	...	3	3	3
Miami	38	22	23	—1	15	3	1	...	...
Wabash	37	24	26	—2	8	1	4	1	2
Huntington	34	20	24	—4	7	...	3	1	3
Howard	49	28	30	—2	8	...	4	4	5
*Grant	91	54	50	4	21	5	9	3	6
Total	322	199	212	—13	70	10	27	13	20
12th District									
LaGrange	13	7	9	—2	3	...	2	1	...
Steuben	22	11	11	...	9	1	3	...	...
Noble	29	27	27	...	1	2	2	...	...
DeKalb	32	23	22	1	3	1	4	1	1
Whitley	15	9	10	—1	...	...	4	...	2
Allen	201	142	145	—3	30	8	8	4	21
*Wells	25	17	15	2	6	1	1	1	...
Adams	23	14	19	—5	7	...	1	...	1
Total	360	250	258	—8	59	13	25	7	25
13th District									
LaPorte	68	47	44	3	13	6	6	4	...
St. Joseph	179	131	134	—3	23	6	20	2	11
*Elkhart	76	61	66	—5	10	...	4	2	2
Starke	7	...	...	...	7	...	...	...	...
Pulaski	10	4	4	...	6	...	...	...	...
Fulton	18	14	12	2	3	2	1	1	...
Marshall	36	23	20	3	9	2	2	...	3
Kosciusko	32	19	20	—1	5	2	3	3	3
Total	426	299	300	—1	76	18	36	12	19
SUMMARY BY DISTRICTS									
1st District	294	179	171	8	70	12	32	9	7
2nd District	199	139	138	1	45	6	11	3	8
3rd District	191	125	126	—1	35	4	24	4	5
4th District	176	122	119	3	22	8	20	1	13
5th District	208	169	167	2	18	5	9	3	11
6th District	234	167	171	—4	29	2	16	8	15
7th District	886	565	527	38	236	28	38	18	46
8th District	252	179	172	7	43	8	19	4	7
9th District	310	215	217	—2	46	6	30	16	11
10th District	323	222	230	—8	76	17	17	8	6
11th District	322	199	212	—13	70	10	27	13	20
12th District	360	250	258	—8	59	13	25	7	25
13th District	426	299	300	—1	76	18	36	12	19
Total	4181	2830	2808	22	825	137	304	106	193

* Physicians are listed in the counties in which they hold membership; not in the counties in which they reside.

ANNUAL SESSIONS OF AMERICAN MEDICAL ASSOCIATION

It was taken by consent that the Executive Secretary should attend the annual session of the American Medical Association which will be held in Atlantic City from June 7 to 11, 1937.

NEW BUSINESS

1. **Contract with editor of THE JOURNAL.** Formal contract, prepared by the attorney of the Association, was signed by Dr. Shanklin, editor of THE JOURNAL, and Dr. Alexander, chairman of the Council.

2. **Advertising chiropractors.** Upon the motion of Dr. Christophel, seconded by Dr. Romberger, the Council referred to the Legislative Committee a resolution introduced by Dr. Forster concerning advertising chiropractors and other practitioners employing physical therapy measures for the treatment of disease.

3. **Selection of Orthopedic Physicians.** Dr. C. J. Clark: "The Department of Services to Crippled Children of the State Department of Public Welfare has requested that the Council decide as to the selection of orthopedic men who are to conduct orthopedic consultation services for crippled children in the various councilor districts of the state.

"I therefore move you that each councilor request recommendations from the county medical societies within his councilor district of orthopedic men to conduct this service. These names received by the various councilors shall then be submitted to the State Board of Public Welfare in order that they may be approved and appointed as the orthopedists who will conduct the orthopedic consultation services in an effort to extend an improved service for the care and treatment of crippled children within this state." This motion was seconded by Dr. Forster, and carried.

4. **Meeting Place.** Dr. C. J. Clark: "Upon the instruction of the Indianapolis Medical Society I make the motion that the secretary be instructed to schedule future meetings of the Executive Committee, of this Council, or any other committees for the Antlers hotel, and use the home of the Indianapolis Medical Society." This motion was seconded by Dr. VanBuskirk.

Dr. Romberger amended the motion of Dr. Clark by adding the suggestion "the Antlers be given the first choice." Dr. Forster seconded the amendment and the motion with the amendment was carried.

The secretary announced that Dr. F. S. Crockett had telephoned and expressed his regrets in not being able to attend this meeting.

ELECTIONS FOR 1937

1. **Two members of Executive Committee for 1937.** Dr. C. J. Clark nominated Dr. C. A. Nafe to succeed himself and Dr. C. H. McCaskey to succeed Dr. Wheeler, resigned. Dr. Romberger moved that the nominations be closed and that the secretary cast the unanimous ballot of the Council for Dr. Nafe and Dr. McCaskey. Motion seconded and carried. The chair declared the election of Dr. Nafe and Dr. McCaskey.

2. **Chairman of Council.** Dr. Kennedy nominated Dr. Austin. Dr. Christophel nominated Dr. Forster. Dr. Romberger moved that the nominations be closed. Motion seconded and carried. Upon balloting, Dr. Austin was elected chairman of the Council for 1937.

There being no further business, the meeting was adjourned.

THOMAS A. HENDRICKS,
Executive Secretary.

BUREAU OF PUBLICITY

December 1, 1936.

Present: William N. Wishard, M.D., chairman; F. M. Gastineau, M.D.; E. V. Hahn, M.D., and T. A. Hendricks, executive secretary.

Release for publication in Saturday, December 12, papers, "Frost-Bites," approved.

Report on medical meeting:

Nov. 18—Parke-Vermillion Medical Society, Clinton, Ind. "Fractures of the Vertebra" (13 present).

Report on the Wayne County (Michigan) Medical Society tuberculosis campaign is to be condensed into one page and carried in the minutes. It is also to be taken up with the State Division of Public Health.

The report upon the pneumonia control campaign is to be forwarded to the State Division of Public Health.

Suggestion was made that John R. Kissinger, who volunteered to help Walter Reed in yellow fever experiments, be paid tribute by the State Medical Association.

The Bureau of Publicity went on record approving the suggestion that the Woman's Auxiliary to the State Association prepare an exhibit upon physicians' hobbies for the annual meeting of the Indiana State Medical Association.

Numerous clippings were reviewed by the Bureau.

December 15, 1936.

Present: William N. Wishard, M.D., chairman; F. M. Gastineau, M.D.; E. V. Hahn, M.D., and T. A. Hendricks, executive secretary.

Release, "Holiday Health," prepared for publication in Thursday papers, December 24, approved by the Bureau.

Report on medical meetings:

Dec. 2—Sullivan County Medical Society, Sullivan, Indiana. Clinic on common skin diseases. (40 present.)

Correspondence in regard to the creation of a Public Relations Committee of the Delaware-Blackford County Medical Society brought to the attention of the Bureau.

Article entitled, "Why Do We Have Medical Ethics?" by the president of the Medical Society of the State of New York brought to the attention of the Bureau. One of the members of the Bureau is to summarize this article for publication in the Bureau's minutes.

Letter received from a chemical company in regard to medical motion pictures. The Bureau instructed the secretary to acknowledge the letter and to ask the company whether these films carry an advertisement of the company in any way.

Newspapers carrying medical supplements brought to the attention of the Bureau. The newspapers in several cities have carried such supplements lately.

Booklets received from a life insurance company in regard to pneumonia prevention. Material contained in these booklets was used as a basis for a release sent out by the Bureau recently.

Letters and pamphlets received from the American Social Hygiene Association. One member of the Bureau was delegated to go through this material and make a report at a subsequent meeting of the Bureau.

The secretary was instructed to find out what recommendations have been made by the Sullivan County Medical Society in regard to a permanent memorial at the Jane Todd Crawford grave.

The secretary was instructed to send a New Year's greeting from the Bureau of Publicity to John R. Kissinger, of Huntington, Indiana, who submitted himself to Dr. Walter Reed's yellow fever experiments.

December 29, 1936.

Present: William N. Wishard, M.D., chairman; F. M. Gastineau, M.D.; E. V. Hahn, M.D., and T. A. Hendricks, executive secretary.

Release, "What the Public May Expect from the Medical Profession," prepared for publication in Monday papers, January 11, approved by the Bureau.

Report on medical meetings:

December 3—Jasper-Newton County Medical Society, Rensselaer, Indiana. "Professional Men in This Modern World." (Forty present.)

Request for speaker:

February meeting of Woman's Auxiliary to the Vigo County Medical Society, Terre Haute. Public meeting. Talk on heart conditions or pneumonia.

Letter received from the representative of the Sullivan County Medical Society who is cooperating with the Bureau of Publicity in a movement to memorialize Jane Todd Crawford who is buried near Sullivan, Indiana. The secretary also made a report that the publisher of the Sullivan paper was very much interested in the plan of the Sullivan County Medical Society and the State Association to memorialize Jane Todd Crawford. The secretary was instructed to have a conference with the head of the pioneer memorial committee of the Woman's Auxiliary and report suggestions to the Bureau at a subsequent meeting.

A letter was received from a Henry County physician enclosing a copy of the Henry County Medical Society by-laws published in 1858. These by-laws were turned over to one member of the Bureau with instructions to prepare an article upon them that might be suitable for publication in THE JOURNAL.

Letter received from Dr. George G. Richardson, the head of the necrology committee of the State Association who had served in this capacity for a number of years, resigning from this position. This matter was referred to the Bureau of Publicity in order that the Bureau might make suggestions as to a chairman of the Committee on Necrology. The Bureau expressed its appreciation for the thoughtful and painstaking work that had been done for many years by the retiring chairman of this committee.

Report of the cancer committee of the Wisconsin State Medical Society referred to a member of the Bureau.

The Bureau was informed of the death of Doctor J. C. Sexton, of Rushville, who served as president of the Indiana State Medical Association in 1899, and the secretary was directed to send a letter to the family of Doctor Sexton expressing the sympathy of the Bureau.

January 5, 1937.

Present: William N. Wishard, M.D., chairman; F. M. Gastineau, M.D.; E. V. Hahn, M.D., and T. A. Hendricks, executive secretary.

The release, "Pneumonia," approved for publication in January 18 papers. It was suggested that this release be checked by an internist.

Report on medical meetings:

December 16, 1936—Parke-Vermillion Medical Society, Clinton, Indiana. "Common Pediatric Problems." (14 present.)

Request for speaker:

January 12—Hancock County Federation of Women's Clubs, Greenfield, Indiana. Speaker upon venereal diseases desired.

The Bureau of Publicity passed favorably upon the copy of the letter which is to be sent to an officer of a life insurance company in New York City in regard to the facilities for the treatment of pneumonia in Indiana. This letter is to be sent over the name of the Bureau of Publicity.

The Bureau of Publicity instructed the secretary to prepare an article to be released upon February 3 which has been designated as National Social Hygiene Day. This release is to be prepared for the attention of the Bureau at its next meeting.

The following letter was received from John R. Kissinger, of Huntington, Indiana, who submitted himself to Dr. Walter Reed's yellow fever experiments, in answer to a letter of greeting from the Bureau of Publicity:

"Your letter of the 29th received and I wish to thank you and the Association for the pleasant greetings for the New Year, and in return Mrs. Kissinger and myself send greetings and best wishes to you and the Association throughout the New Year.

"I would feel highly honored to know that my name was placed on your records in the Indiana Historical Medical History, although I feel that my name would be small with the great names you have on your records.

"Again thanking you for the interest shown me, I remain

"Yours respectfully,

"John R. Kissinger."

Article in regard to tuberculosis by the director of health education of the Indiana State Division of Public Health in the January issue of the *Indiana Parent-Teacher* brought to the attention of and approved by the Bureau of Publicity.

Letter received from the chairman of the McDowell Memorial Committee of the Kentucky State Medical Society in regard to the purchase of the Ephriam McDowell home at Danville, Kentucky, in which the first ovariotomy was performed on Christmas Day, 1809. Jane Todd Crawford, who is buried at Sullivan, Indiana, was the patient in the case.

Material in regard to cancer prevention published by a life insurance company brought to the attention of the Bureau.

Letters received from Sullivan County telling of the interest that had been taken by a prominent citizen of that county in the story of Jane Todd Crawford and the program of the Indiana State Medical Association and the Woman's Auxiliary to memorialize this medical heroine brought to the attention of the Bureau.

THIRD DISTRICT MEDICAL SOCIETY

The Third District Medical Society met December 2, 1936, in the Greystone Hotel, Bedford.

The program included papers by Dr. H. R. Wilber, of Jeffersonville, on "Surgical Consultation"; by Dr. W. W. Weaver, of New Albany, on "Tonsilectomy"; and a DeLee motion picture on "The Forceps Operation," which was discussed by Dr. C. O. McCormick, of Indianapolis.

TENTH DISTRICT MEDICAL SOCIETY

The fall meeting of the Tenth District Medical Society was held at the Woodmar Country Club, Hammond, Indiana, on November 12th, 1936. This was an afternoon and evening meeting. The speakers and their subjects were as follows:

Functional Nervous Disturbances: Their Relations to Organic Disease and Method of Handling. By George W. Hall, M.D., Professor of Neurology and Psychiatry, Northwestern University.

Treatment of Angina Pectoris. By N. C. Gilbert, M.D., Professor of Medicine, Northwestern University.

Toxemias of Pregnancy: Their Etiology, Diagnosis and Treatment. By William B. Serbin, M.D., Associate in Obstetrics, Northwestern University.

Etiology and Treatment of Anemias. By Russell L. Hayden, M.D., of the Cleveland Clinic, Cleveland, Ohio.

Due to the fact that in the future only one district meeting is to be held each year, it was necessary to shorten the term of office of the present officers in order to have them conform with the next place of meeting. This was done through consent by Dr. Elledge, Dr. Buchanan and Dr. Eggers.

Gary, Indiana, was selected as the next place of meeting. In the future, this district will hold its meeting in April of each year, and for the next meeting the time was set for April 8th, 1937.

The new officers are:

President, Dr. G. L. Verplank, Gary.
Vice-president, Dr. R. M. Wimmer, Gary.
Secretary, Dr. E. D. Skeen, Gary.

N. K. FORSTER, M.D.,
Councilor, Tenth District.

BRIGHT'S DISEASE—RICHTER

(Continued from page 83)

formerly classified as chronic interstitial or vascular nephritis. It is now clear that the renal involvement in primary hypertension is secondary; hypertension leads to generalized arteriolar sclerosis. When such changes become severe, atrophy of the renal parenchyma results. However, in only about 10 per cent of the cases of primary hypertension does death result from uremia. Tests of renal function reveal that the large majority of patients with primary hypertension have no significant impairment of renal function. On the other hand, most of the patients dying of uremia have vascular nephritis. This is due to the fact that glomerular nephritis is a comparatively rare disease, while primary hypertension is very common. In a pathological laboratory where a large number of autopsies are done one finds in the course of a year many cases of vascular nephritis but very few instances of glomerular nephritis.

Since the treatment which has been described for progressive chronic glomerular nephritis is the same as for primary hypertension with renal insufficiency, it need not be repeated. One word of caution is pertinent. Even though renal impairment has developed in a patient with primary or essential hypertension, continue to watch carefully the extra-renal lesions, the small vessels in the ocular fundi, the condition of the heart, etc. Even though definite renal insufficiency exists, before the terminal stage of uremia, death is still more probable from a cardiac or intracranial lesion. The detection of such a complication will aid you in both prognosis and treatment.

CONCLUSIONS

The intelligent management of any disease depends on a tripartite knowledge:

(1) Knowledge of the general course of the disease.

(2) Knowledge of the particular patient.

(3) Knowledge of therapeutic weapons.

In no disease is it so necessary to utilize this trinity as in Bright's disease.

FEDERAL INCOME AND SOCIAL SECURITY TAXES—SMITH

(Continued from page 96)

Every employer who becomes liable for tax shall keep accurate records, containing sufficient information to enable the Commissioner to determine whether the taxes have been correctly computed and paid. Such records shall be maintained for a period of at least four years from the date the tax is due, and shall be open at all times to the inspection of internal revenue officers.

COUNTY SOCIETY REPORTS

ADAMS COUNTY MEDICAL SOCIETY officers for 1937 are:

President, C. P. Hinchman, Geneva.
Vice-president, G. J. Kohne, Decatur.
Secretary-treasurer, H. F. Zwick, Decatur.

* * *

BOONE COUNTY MEDICAL SOCIETY met at Lebanon, at the Ulen Country Club, January fifth. Dr. J. H. Warvel, of Indianapolis, presented a paper on "The Use of Protamine Insulinate in the Treatment of Diabetes Mellitus."

* * *

CARROLL COUNTY MEDICAL SOCIETY members held a meeting at Burlington, January fourteenth, with Dr. George Garceau, of Indianapolis, as principal speaker. Dr. Garceau's subject was "Some Common Orthopedic Problems Confronting the General Practitioner."

* * *

CASS COUNTY MEDICAL SOCIETY officers for 1937 are:

President, H. G. Steinmetz, Logansport.
Vice-president, W. R. Hickson, Logansport.
Secretary-treasurer, H. D. Tripp, Logansport.

At this meeting, Dr. DeLee's films were shown. Attendance numbered thirteen.

* * *

CLINTON COUNTY MEDICAL SOCIETY met at the Clinton County Hospital in Frankfort, January seventh, to hear Dr. Claude A. Robison talk about "Acute Upper Respiratory Infections."

* * *

DAVIESS-MARTIN COUNTY MEDICAL SOCIETY members met December fifteenth in Washington. Officers were elected as follows:

President, E. E. Long, Shoals.
Vice-president, E. B. Smooth, Washington.
Secretary-treasurer, C. P. Fox, Washington.

* * *

DEARBORN-OHIO COUNTY MEDICAL SOCIETY met at the Chatter Box in Lawrenceburg, January seventh. Dr. E. L. Libbert presented a paper on "Tularemia."

* * *

DECATUR COUNTY MEDICAL SOCIETY officers for 1937 are:

President, I. M. Sanders, Greensburg.
Vice-president, J. T. Morrison, Greensburg.
Secretary-treasurer, Charles Overpeck, Greensburg.

* * *

FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY held its regular meeting in the Chamber of Commerce Building, Fort Wayne, December fifteenth. Dr. David I. Schwartz presented a paper on "The Treatment of Acute Hematogenous Osteomyelitis." Attendance numbered thirty-five. The society voted to request a special meeting of all county society chairmen of committees on public health and legislation.

* * *

FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY met at the Lutheran Hospital in Fort Wayne, January fifth, with Drs. B. S. Cornell, E. N. Ferguson, L. W. Elston, W. W. Duemling, J. T. Short and E. R. Carlo as speakers. Cases were reported. Luncheon after the meeting was supplied by the hospital.

* * *

FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY met at Veedersburg, January seventh, for a dinner meeting. Dr. Holland Williamson, of Danville, Illinois, talked on "Physiology and Conduct of Normal Labor." A four-reel motion picture was shown by a representative of the Indiana Division of Public Health. Attendance numbered fourteen.

* * *

FULTON COUNTY MEDICAL SOCIETY officers for 1937 are:

President, M. E. Leckrone, Rochester.
Vice-president, H. M. Markley, Rochester.
Secretary-treasurer, A. E. Stinson, Rochester.

GIBSON COUNTY MEDICAL SOCIETY met in Princeton, December fifteenth. Dr. Harold D. Lynch, of Evansville, talked on "Infant Feeding."

Officers for 1937 are:

President, H. M. Arthur, Hazelton.
Vice-president, J. L. Morris, Princeton.
Secretary-treasurer, O. M. Graves, Princeton.

* * *

GIBSON COUNTY MEDICAL SOCIETY met in the Emerson Hotel, Princeton, January eleventh, for a dinner meeting. Dr. C. B. McGlumphy talked on "The Use of the Laboratory to the Doctor in General Practice." Attendance numbered fourteen.

* * *

GRANT COUNTY MEDICAL SOCIETY met at the Spencer Hotel in Marion, December twenty-ninth, for its annual "ladies' night" party. Attendance numbered sixty-five. Dr. E. F. Jones, 1936 president of the society who recently resigned to reside in Richmond, was master of ceremonies. Mr. Richard Mills, of Indianapolis, presented a humorous talk on "Coffee, Golf and Silverware."

* * *

HAMILTON COUNTY MEDICAL SOCIETY members met for their annual meeting in Noblesville, December eighth, when the following officers were elected:

President, Russell Havens, Cicero.
Vice-president, John L. Reck, Sheridan.
Secretary-treasurer, J. C. Ambrose, Arcadia.

* * *

HANCOCK COUNTY MEDICAL SOCIETY officers for 1937 are:

President, Robert E. Kinneman, Greenfield.
Vice-president, C. Herbert Bruner, Greenfield.
Secretary-treasurer, Joseph L. Allen, Greenfield.

* * *

HOWARD COUNTY MEDICAL SOCIETY members met at the St. Joseph Hospital in Kokomo, January eighth. Dr. C. O. McCormick, Indianapolis, talked on "Rectal Analgesia." Attendance numbered twenty.

* * *

INDIANAPOLIS MEDICAL SOCIETY held its annual dinner-dance and installation of officers January fifth at the Hotel Antlers.

Speakers at the January twelfth meeting were Dr. Kenneth Kohlstaedt and Dr. Frederic Taylor, whose subjects were "The Hippuric Acid Excretion and Urea Clearance as a Test of Hepatic Function," and "Early Operation in Acute Gallbladder Disease."

* * *

JACKSON COUNTY MEDICAL SOCIETY officers for 1937 are:

President, W. Durbin Day, Seymour.
Vice-president, G. R. Gillespie, Brownstown.
Secretary-treasurer, G. H. Kamman, Seymour.

* * *

JAY COUNTY MEDICAL SOCIETY met at the Portland Country Club, January eighth. Drs. Lansford and Schwartz told of the "Treatment of Hip Joint Fractures with Beefbone Keys," and presented two case reports. Other speakers were Drs. F. E. Keeling, J. E. Nixon and M. M. Moran.

* * *

JEFFERSON COUNTY MEDICAL SOCIETY officers for 1937 are:

President, Anna Goss, Madison.
Vice-president, Wm. A. Shuck, Madison.
Secretary-treasurer, O. A. Turner, Madison.

* * *

JENNINGS COUNTY MEDICAL SOCIETY held a meeting in North Vernon, December fourteenth. Officers were elected as follows:

President, J. H. Green, North Vernon.
Vice-president, W. H. Stemm, North Vernon.
Secretary-treasurer, D. L. McAuliffe, North Vernon.

KNOX COUNTY MEDICAL SOCIETY members met at the Jewel Cafe in Vincennes, January twelfth. Dr. C. O. Richey talked on "Diagnosis and Treatment of Diseases of the Rectum and Sigmoid." Fourteen members were present.

* * *

KOSCIUSKO COUNTY MEDICAL SOCIETY held a meeting at the Hotel Hays in Warsaw, January twelfth. Dr. Max D. Garber, of Warsaw, presented a paper on "Pneumonia Serum Therapy."

* * *

LAPORTE COUNTY MEDICAL SOCIETY held a meeting at LaPorte, December seventeenth, with Dr. A. J. Sparks, of Fort Wayne, as principal speaker. His subject was "Diagnosis of Pathology of the Prostate Gland." Attendance numbered twenty-four.

Officers of the LaPorte County Medical Society for 1937 are:

President, H. A. Garner, Hanna.
Vice-president, L. E. Stephenson, Michigan City.
Secretary-treasurer, W. B. Martin, LaPorte.

* * *

LAWRENCE COUNTY MEDICAL SOCIETY members met December ninth, at the Greystone Hotel in Bedford for election of officers. They are:

President, Joseph Dusard, Bedford.
Vice-president, J. R. Hamilton, Mitchell.
Secretary-treasurer, L. H. Allen, Bedford.

* * *

LAWRENCE COUNTY MEDICAL SOCIETY held its first meeting of the year at Bedford, January sixth. This was a business meeting. New officers were installed.

* * *

MADISON COUNTY MEDICAL SOCIETY members held their annual meeting for election of officers at St. John's Hospital in Anderson, December twenty-first. Officers are:

President, T. M. Jones, Anderson.
Vice-president, Perry Cotton, Elwood.
Secretary-treasurer, M. A. Austin, Anderson. Dr. Austin was elected as secretary-treasurer to serve his twentieth year.

* * *

MADISON COUNTY MEDICAL SOCIETY held a meeting January eighteenth, at St. John's Hospital in Anderson. Representatives of the Indiana Division of Public Health discussed plans of the department for maternal and child health and for local health administration by full-time health officers.

* * *

MARSHALL COUNTY MEDICAL SOCIETY met at the Hi-Way Inn, near Plymouth, December second. Dr. Douglas Owen, of South Bend, presented a paper on "Phycho-Analytical Psychiatry for the General Practitioner." Attendance numbered eighteen.

* * *

MARSHALL COUNTY MEDICAL SOCIETY members elected the following officers for 1937:

President, C. R. Graham, Bourbon.
Vice-president, T. C. Eley, Plymouth.
Secretary-treasurer, L. W. Vore, Plymouth.

At the January sixth meeting, Dr. David A. Bickel, of South Bend, presented a paper on "Endocrine Therapy." Attendance numbered seventeen.

* * *

MONROE COUNTY MEDICAL SOCIETY officers were elected at the December ninth meeting held in Bloomington. They are:

President, Ben Ross, Bloomington.
Vice-president, Robert Lyons, Bloomington.
Secretary-treasurer, Dillon Geiger, Bloomington.

* * *

MONTGOMERY COUNTY MEDICAL SOCIETY for 1937 are:

President, Robert J. Millis, Crawfordsville.
Vice-president, M. E. Gross, Ladoga.
Secretary-treasurer, John L. Sharp, Crawfordsville.

MUNCIE ACADEMY OF MEDICINE held its regular dinner meeting at the Hotel Roberts, January twelfth, with Dr. Henry C. Hesseltine, of Chicago, as principal speaker. Dr. Hesseltine discussed "Diagnosis and Treatment of Genital Tract Infections in the Obstetrical Gynecological Patient."

* * *

MIAMI COUNTY MEDICAL SOCIETY officers for 1937 are:

President, A. S. Newell, Converse.
Vice-president, C. R. Herd, Peru.
Secretary-treasurer, E. H. Andrews, Peru.

At the December meeting, Dr. E. F. Kiser, of Indianapolis, presented a paper on "Errors in Diagnosis and Treatment of Cardiovascular Diseases."

* * *

NORTHEASTERN INDIANA ACADEMY OF MEDICINE met in Kendallville, December seventeenth, with Dr. Eugene F. Traut, of Chicago, as principal speaker. Dr. Traut's subject was "Chronic Arthritis: Its Causes, Prognosis, and Treatment."

* * *

ORANGE COUNTY MEDICAL SOCIETY members met December twenty-third and elected the following officers:

President, J. R. Dillinger, French Lick.
Vice-president, C. E. Boyd, West Baden Springs.
Secretary-treasurer, George Dillinger, French Lick.

* * *

OWEN COUNTY MEDICAL SOCIETY held a meeting at Spencer, December eighteenth for election of officers and to hear Mr. Horace Bacon, chairman of the county welfare board, discuss "Old Age Pensions."

Officers are:

President, Charles E. Stouder, Gosport.
Secretary-treasurer, Julia S. Thom, Gosport.

* * *

PARKE-VERMILLION COUNTY MEDICAL SOCIETY met at Clinton, December twenty-third. Dr. Russell Hippensteel, of Indianapolis, talked on general pediatric problems. Officers for 1937 were elected as follows:

President, F. G. Greene, Bloomingdale.
Secretary-treasurer, S. C. Darroch, Cayuga.

* * *

PIKE COUNTY MEDICAL SOCIETY officers for 1937 are:

President, T. R. Rice, Petersburg.
Vice-president, D. E. Taylor, Velpen.
Secretary-treasurer, A. R. Logan, Petersburg.

* * *

PORTER COUNTY MEDICAL SOCIETY officers for 1937 are:

President, P. M. Corboy, Valparaiso.
Vice-president, John Dale, Chesterton.
Secretary-treasurer, C. M. Davis, Valparaiso.

* * *

PUTNAM COUNTY MEDICAL SOCIETY officers for 1937 are:

President, Clyde G. Gray, Cloverdale.
Secretary-treasurer, G. D. Rhea, Greencastle.

* * *

RANDOLPH COUNTY MEDICAL SOCIETY held its first meeting of the year in Winchester, January eleventh. Dr. R. W. Reid was the principal speaker.

Officers for 1937 are:

President, John W. Wallace, Lynn.
Vice-president, O. E. Current, Farmland.
Secretary-treasurer, L. W. Painter, Winchester.

Physicians, attorneys and dentists of the community gathered in Shelbyville, January sixth, for a joint meeting sponsored by the SHELBY COUNTY MEDICAL SOCIETY. Mr. James V. Donadio, attorney, of Indianapolis, was the principal speaker at the banquet. His subject was "The Doctor and the Law in Connection with Personal Injury Cases."

* * *

STARKE COUNTY MEDICAL SOCIETY was re-organized at a meeting held in Knox, December fourth. Officers were elected as follows:

President, A. Fisher, North Judson.
Vice-president, J. L. DeNaut, Hamlet.
Secretary-treasurer, J. F. DeNaut, Knox.

Dr. R. L. Sensenich, of South Bend, and Dr. W. B. Christophel, of Mishawaka, were present and assisted in the reorganization of the society.

* * *

ST. JOSEPH COUNTY MEDICAL SOCIETY held its annual meeting and election of officers, December eighth, at the Jefferson Plaza, in South Bend. Officers are:

President, John Hilbert, South Bend.
Vice-president, W. L. Spalding, Mishawaka.
Secretary, J. V. Cassady, South Bend.
Assistant-secretary, C. M. Sennett, South Bend.

Forty-five physicians were in attendance at the November twenty-fourth meeting of the St. Joseph County Medical Society when Dr. C. C. Hyde of South Bend read a paper on "Urological Tidbits."

The fifty-first annual meeting of the St. Joseph County Medical Society was held in Mishawaka, November eighteenth, in the Masonic Social Room. Sixty members and thirty-six guests attended the three sessions held during the day. In the morning, papers were presented by Drs. H. J. Zimmer, R. M. McDonald, C. J. Goethals, E. M. Sirlin, M. E. Whitlock, Vera Christophel, F. W. Logan, and H. C. Wurster, all of Mishawaka, and by Dr. H. C. Proudfit of Osceola. In the afternoon, Dr. Norman R. Kretschmer of Ann Arbor, Michigan, talked on "Ante Partum Bleeding." Dr. J. H. Warvel of Indianapolis discussed "Experiences with Protamine Insulin" and Dr. J. deJ. Pemberton, of Rochester, Minnesota, presented a paper on "Surgery of the Thyroid Gland." In the evening, Dr. Irving S. Cutter of Chicago, presented an illustrated lecture on "The Fight Against Puerperal Fever."

* * *

ST. JOSEPH COUNTY MEDICAL SOCIETY members met in the Jefferson Plaza, January twelfth, for installation of officers and a brief business meeting.

* * *

SULLIVAN COUNTY MEDICAL SOCIETY officers for 1937 are:

President, John W. Woner, Merom.
Vice-president, M. H. Bedwell, Sullivan.
Secretary-treasurer, James B. Maple, Sullivan.

* * *

TIPPECANOE COUNTY MEDICAL SOCIETY met in Lincoln Lodge, December eighth, for a business and social meeting. Reports were presented by the delegates, councilor and secretary for the year. Officers for 1937 are:

President, Robert H. Wagoner, Colburn.
Vice-president, O. E. Greist, Lafayette.
Secretary, J. C. Burkle, Lafayette.
Treasurer, Charles Hupe, Lafayette.

* * *

TIPTON COUNTY MEDICAL SOCIETY officers for 1937 are:

President, J. V. Carter, Tipton.
Vice-president, B. V. Chance, Windfall.
Secretary-treasurer, G. H. Warne, Tipton.

TIPTON COUNTY MEDICAL SOCIETY met at Tipton, January fifteenth. Dr. Matthew Winters, of Indianapolis, was the principal speaker, his subject being "Infant Feeding."

* * *

VANDERBURGH COUNTY MEDICAL SOCIETY met in Evansville, January twelfth, with Dr. Minor Miller as principal speaker. Dr. Miller talked about "Venereal Diseases as a Menace to Public Health." Thirty-six were in attendance.

* * *

VANDERBURGH COUNTY MEDICAL SOCIETY met in Evansville, December eighth, at the Vendome Hotel. Dr. Gardner Johnson was the principal speaker, his subject being "Tuberculosis of the Kidney." Attendance numbered forty-one. The following officers were elected for 1937:

President. C. C. Sutter, Evansville.
Vice-president, A. E. Newman, Evansville.
Secretary-treasurer, P. E. Yunker, Evansville.

* * *

VIGO COUNTY MEDICAL SOCIETY'S annual guest-day dinner meeting was held January twelfth in Terre Haute. Speakers included Dr. Hazel Tesh Pfennig, whose subject was "The People and Literature of Scandinavian Countries."

* * *

WABASH COUNTY MEDICAL SOCIETY met in Wabash, December second, with eighteen members present. Dr. Frank E. Jones presented a paper on "State Medicine."

Officers for 1937 were elected as follows:
President, James L. Walker, Lafontaine.
Vice-president, R. M. LaSalle, Wabash.
Secretary-treasurer, Arthur J. Steffen, Wabash.

* * *

WABASH COUNTY MEDICAL SOCIETY met at the Wabash County Hospital, January sixth. Dr. W. W. Duemling, of Fort Wayne, talked on "Diseases of the Skin." Attendance numbered twenty.

* * *

WAYNE-UNION COUNTY MEDICAL SOCIETY members met at the Richmond-Leland Hotel, in Richmond, January fourteenth, to hear Dr. Paul Merrell, of Indianapolis, discuss "Surgery in Pulmonary Tuberculosis." Attendance numbered thirty.

SOMETHING FOR PHYSICIANS TO THINK ABOUT

The following item is taken from the Columbus, Ohio, Medical Society *Bulletin* for January, 1937:

CITY COUNCIL ASKED $30,000 FOR PHYSICIANS

At the December 14th meeting of the Academy, Dr. J. D. Dunham, as a member of the Columbus Board of Health, reported the following action taken by that body.

The City Council was requested to appropriate $30,000 to be applied to fees for physicians and surgeons caring for indigent patients in the various hospitals. It was further suggested that the Academy, through its appropriate committee, apply for a portion of the gasoline fund to compensate physicians and surgeons for the care of persons injured in automobile accidents.

On the latter point, however, it is revealed that no allotment to physicians can be made from the gasoline tax fund without enactment of a law to that effect by the State Legislature. For the position of the Ohio State Medical Association on this point, the report of the Reference Committee on Resolutions at the last Association meeting is of interest. This report was published in the November issue of the *Journal*, pages 1114 and 1115, involving the committee action on a resolution presented to the House of Delegates on this subject.

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BOOKS

REVIEWS

BRIGHT'S DISEASE AND ARTERIAL HYPERTENSION. By Willard J. Stone, B.Ss., M.D., F.A.C.P., Clinical Professor of Medicine, School of Medicine, University of Southern California, Los Angeles. 351 pages. Illustrated. Cloth. Price $5.00. W. B. Saunders Company, Philadelphia and London, 1936.

Your reviewer likes Dr. Stone's new book on Bright's disease and arterial hypertension. His historic approach is refreshing and valuable. A classification of the nephritides is clear and concise and his chapter headings have not only his own nomenclature but the more orthodox terminology of an earlier day. The case reports are well selected and as a whole the work is a valuable addition to our literature on renal disease.

THE PRACTICE OF MEDICINE. By Jonathan Campbell Meakins. M.D., LL.D., professor of medicine and director of the Department of Medicine, McGill University. 1343 pages with 505 illustrations, including 35 in color. Cloth. Price $10.00. The C. V. Mosby Company, St. Louis, 1936.

Dr. Meakins has written an excellent textbook on the practice of medicine. His description of diseases is clear, and concise and sufficiently full to give one a satisfactory understanding of the particular disease which is discussed. There are a few sins of omission but none of any serious moment. The book is beautifully illustrated, both in black and white and colors, a feature which adds materially to its usefulness.

Dr. Meakins' book deserves a place alongside the classical volumes of Osler and the magnificent work of Cecil on the shelf of every physician interested in internal medicine.

THE AMERICAN MEDICAL PROFESSION, 1783 to 1850. By Henry Burnell Shafer, Ph.D. 271 pages. Cloth. Price $3.25. The Columbia University Press, New York, 1936.

This reviewer's first reading of Shafer's book was somewhat disappointing. On re-reading it, however, it was evident to the reviewer that he and not the author was at fault. Shafer has written a work not so much on *who* practiced medicine in the early days of America, but *how* they practiced medicine. In other words, it is not so much a compendium of short biographical sketches as it is a description of the methods in medicine up to 1850. The book supplements splendidly the work of Packard on the History of Medicine in the United States, and the two together give one an excellent insight into the subject.

MEDICAL CLASSICS. Compiled by Emerson Crosby Kelly, M.D., of the Department of Surgery, Albany Medical College. Volume 1, Number 1. A periodical published by the Williams and Wilkins Company, Baltimore, Maryland.

The publishers of Medical Classics are to be congratulated upon their altruistic undertaking. They are attempting to publish, over a period of several years, the original papers which have been the milestones of medicine. In the case of publications in foreign languages, the original is given as well as the English translation. These papers have been supplemented by bibliographies and a portrait of the author. When completed, this publication should make one of the most valuable collections of a medico-historical character that has ever been attempted by an American publisher.

WHY BRING THAT UP? A Guide to and from Seasickness. By Dr. J. F. Montague, editor of Health Digest. 130 pages. Cloth. Price $2.00. Home Health Library, Inc., New York. 1936.

"Why Bring That Up" is, as the author puts it, a guide to and from seasickness. And, while being essentially humorous, it is a brief for holidays, and in particular seavoyage holidays.

When one feels the need of a change there is no surer way to enter a different world than to move up a gangplank and watch a sturdy craft cast off its hawsers and move out to sea, and one of the chief experiences of this unaccustomed new life is known as seasickness. It is about this subject that the author laughs and advises, at the same time giving many valuable instructions regarding preparation for a voyage.

He analyzes the causes and effects and concludes that the fear of becoming sick is perhaps the most frequent cause of mal de mer. He advises: begin a cruise with a fatalistic attitude; take precautions that common sense dictates and then if seasickness comes, what of it? The lasting things are the pure fresh air, the sunsets, the starry nights, the ports of call, and the joy of a holiday.

AN INDEX OF DIFFERENTIAL DIAGNOSIS OF MAIN SYMPTOMS. By Various Writers. Edited by Herbert French, C.V.O., C.B.E., M.A., M.D., Oxon., F.R.C.P., London, Consulting Physician to Guy's Hospital; late physician to His Majesty's Household. 1145 pages with 742 illustrations, 196 in color. Fifth edition. Cloth. Price $16.00. William Wood and Company, Baltimore, 1936.

For a book which has the proportions of French's Differential Diagnosis, now containing nearly 1,200 pages, to be revised and enlarged with reprintings numbering twelve, the text just has to be good. The list of contributors numbers 19 and represent the best medical minds of Great Britain. The index of this book is the work of a genius and comprises 225 pages of the volume.

This reviewer first saw French's text in 1916 and has relied on it for a ready source of information in differential diagnosis because the material can be quickly found correlated. The information gathered from the book can be relied upon as being accurate. It can be said without stretching the point that if the general practitioner had to limit his fund of knowledge to one textbook, he would be the better off with this one text to the exclusion of all others, for it is the accurate diagnosis that makes a satisfactory practice.

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THE CONTROL OF SYPHILIS AND GONORRHEA

LEROY E. BURNEY, M.D.

Passed Assistant Surgeon
U. S. Public Health Service

Washington, D. C.

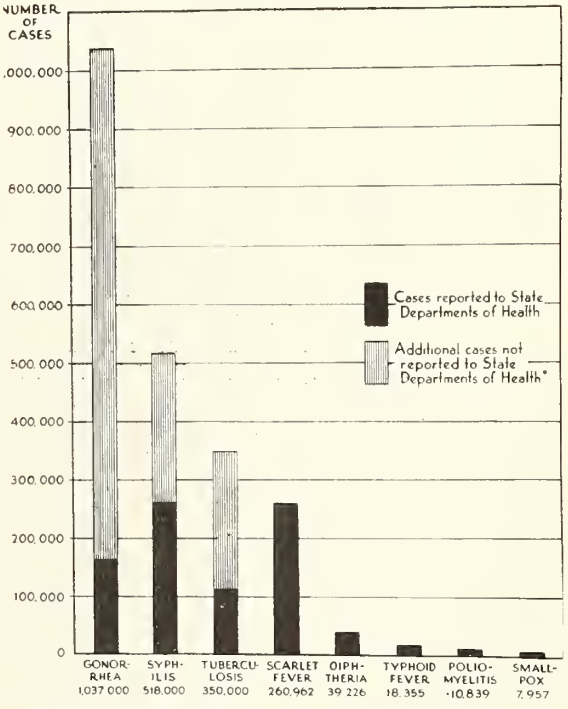
The present campaign directed against syphilis and gonorrhea is based upon the premise that they are communicable diseases like measles, mumps or smallpox. Unfortunately, in the past, they have been considered the "black sheep" of the communicable disease family, to be talked of only in private and then in hushed tones. There has been a mysticism, a shrouded veil around them similar to that our Asiatic friends use to hide their ladies. As the result, progress in their control has been seriously retarded and they have steadily and continuously taken a staggering toll in human health and happiness.

THE PROBLEM

One in every ten[1] adults in the United States has or has had syphilis and an equal or larger number has contracted gonorrhea. It has been estimated, after careful surveys,[2] that there are 683,000 cases of syphilis and 493,000 cases of gonorrhea under observation or treatment at all times. It has been further estimated that, at the very minimum, there are 518,000 new cases of early acquired syphilis and 1,037,000 new cases of gonorrhea each year, which means that there is one new case of syphilis and two of gonorrhea contracted every minute of every day. This does not include the thousands of patients seeking treatment from drug clerks, quacks and other unauthorized sources. In several large communities, these sources have been found to treat twice as many patients with gonorrhea and syphilis as do physicians.

Although no definite statement as to the prevalence and incidence of syphilis can be made for the State of Indiana since the reporting of these cases is very inadequate, it is estimated that if the conditions in Indiana are similar to those in comparable surveyed[3] communities in the United States, there are approximately 21,000 cases of early syphilis in this state each year, that is, there are more fresh infections annually in Indiana than there are people in Bloomington or Logansport.

NEW CASES OF SYPHILIS AND GONORRHEA COMPARED WITH OTHER COMMUNICABLE DISEASES IN THE UNITED STATES DURING 1935



* Cases of venereal disease based on one-day surveys of all medical sources in the United States by the U. S. Public Health Service. Cases of tuberculosis based on relationship between reported and known active cases found to exist by the National Tuberculosis Association.

Because of the predominance of the white race in Indiana most of these infections are among the white population. In addition it is estimated that

[1] Parran, Thomas, Surgeon General, U. S. Public Health Service: *Survey Graphic*, July, 1936.

[2] Usilton, L. J.: *Venereal Disease Information*, Washington, 1935, Vol. 16, No. 5.

[3] Based on rates in 29 and 38 surveyed communities with a respective population of 14,000,000 and 10,000,000.

16,000 cases of late syphilis apply for treatment for the first time each year. The same evidence indicates that there is a constant patient population of 16,000 syphilitics under treatment by authorized sources.

At the present time the Indiana State Department of Health reports the number of new cases of syphilis to the Public Health Service but these are largely confined to reports from public clinics. It is presumed that the situation in Indiana is similar to that in the country as a whole—that approximately two-thirds of the cases of syphilis are under the care of the private physician.

What would happen if there were 21,000 cases of typhoid fever or diphtheria every year in Indiana?

Yet we have a pandemic of syphilis and gonorrhea and do little or nothing about it.

Consider some of the social and economic aspects of the problem, particularly with reference to syphilis. From a number of sources, it is estimated[4] that 6.5 per cent of all heart disease is syphilitic in origin, with the result that approximately 40,000 deaths occur annually from cardiovascular syphilis. With each death representing a loss of from 19 to 23 years of life, it means that annually there is a total loss of from 800,000 to 850,000 life years because of cardiovascular syphilis. These deaths represent an enormous economic loss, since in most cases death comes during the period of the person's greatest productivity. What makes it even more regrettable is that most of these deaths could be prevented if the patient had been adequately treated for his early syphilis. The Cooperative Clinical Group[5] found that 66 per cent of patients with cardiovascular syphilis had never been treated. Syphilis produces a heart involvement in 45 per cent when early syphilis is untreated but only in 4 per cent if the patient is treated.

There are 8,600 first admissions for general paralysis annually to approximately 500 hospitals[6] treating mental diseases. In 171 state[7] hospitals for mental diseases there are 18,700 cases of general paralysis. The annual loss of life from general paralysis and tabes dorsalis reported by the Bureau of Census for 1933 was 5,600. This means there are approximately 114,000 years of life lost annually from these two diseases; and just as for cardiovascular syphilis, a large proportion of these cases could be prevented by adequate treatment.

Neurosyphilis develops in 25 per cent of untreated cases but only in 6 per cent of those treated. How important it is then that syphilis must be found early and treated adequately to prevent such needless tragedies!

One of the most striking characteristics of persons who acquire venereal diseases is their youth. These diseases are acquired chiefly by young adults, the greatest age incidence being between 16 and 30 years. But more illuminating and startling is the fact that of the 500,000 new cases of syphilis each year, 100,000 occur before the age of 20, and 11,000 in children between the ages of 11 and 15. This emphasizes two very important points. First, that any educational program against these two diseases will have to reach boys and girls of high school and even grammar school age, beginning at the age of 12.

The second aspect of this younger age incidence is an economic one. These young people are either in school and earning no money, or are just beginning to work and belong to the group with a low wage scale. They are in no position to pay for 18 months of expensive treatment. Many, driven to seek treatment from the drug clerk, from the quack or if they do find their way to a physician, take only a few treatments until their symptoms disappear. We must provide treatment for them, accessible and within their means and further make certain that they continue this therapy until they are at least rendered non-infectious by administering a minimum of 20 injections each of an arsenical compound and a heavy metal. Unless we appreciate this early age incidence and provide for it accordingly, we are overlooking a most important part of our problem and the ultimate control of syphilis and gonorrhea will be greatly handicapped.

Now that we understand and appreciate the magnitude of the problem, its vital importance both socially and economically, what procedures are necessary and what methods do we have to control these two pandemic diseases?

CONTROL BY TREATMENT

Killing the spirochete is our chief weapon in the war against syphilis and we have in the arsphenamines and bismuth effective lethal agents. The most difficult problem is to utilize these spirochetal poisons in the human organism. Diagnose syphilis early, treat it adequately and the disease will be controlled. Every early case given 20 injections each of an arsenical and a heavy metal (bismuth or mercury) removes one infectious individual from the field. Patients in whom a diagnosis is made in the seronegative stage (dark-field positive blood negative) and treatment is begun at once, have an 86 per cent[8] chance for a "cure" if this treatment consists of at least 30 injections of an arsenical and 40 injections of a heavy metal, provided this treatment is given continuously, week after week for 70 weeks. After the blood has become positive, the longer the time interval between infection and the beginning of treatment, the less the chance for "cure."

[4] Rates determined by the statistical section of the Venereal Disease Division, Public Health Service, Washington. For detailed calculations, see: Proceedings of Conference of Venereal Disease Control Work, Supplement No. 3, to *Venereal Disease Information*, Washington (Government Printing Office), 1937.

[5] Cole, H. N., et al.: Cardiovascular Syphilis, unpublished.

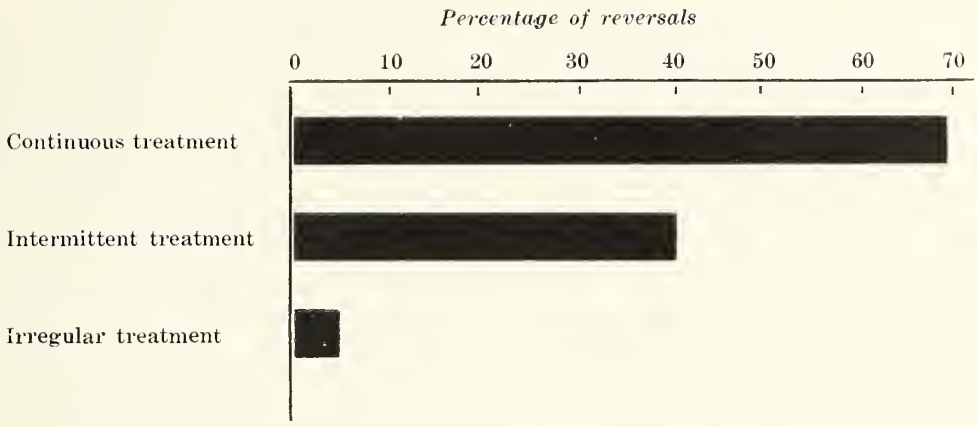
[6] U. S. Bureau of Census.

[7] U. S. Bureau of Census. Mortality Statistics.

[8] Stokes, J. H., et al.: *Venereal Disease Information*, Washington, 1934, 15:341.

COMPARISON OF EFFECTIVENESS OF TREATMENT METHODS IN SECURING WASSERMANN REVERSALS IN ONE YEAR

(Treatment with arsphenamine and heavy metals)



SYPHILIS IN PREGNANCY

Of the potential mothers 186,000 in the United States have active syphilis.[9] What chance do the 70 per 1,000 pregnant women who have syphilis have to deliver a living nonsyphilitic child? Very little unless they receive treatment during the early months of their pregnancy. A syphilitic mother, untreated, has only 17 per cent chance to deliver a nonsyphilitic child, but if the diagnosis is made and treatment begun before the fifth month of pregnancy, she has a 91 per cent chance to deliver a nonsyphilitic baby; and if she receives treatment, even inadequate, any time during her pregnancy there will be a 65 per cent chance for her to deliver a well child, free of syphilis. Surely the difference between 17 per cent and 91 per cent is great enough to convince every physician of the necessity of making a serologic test on every pregnant patient early in her pregnancy regardless of her social or economic status. This measure only will prevent the tragedy of abortion, miscarriage, stillbirth and syphilitic children. Syphilis is no respecter of wealth or position. As Kipling so perfectly stated:

"The Colonel's lady and Judy O'Grady
are sisters under the skin."

Take a blood test as soon as the expectant mother makes her first call. Begin treatment at once if her blood is positive. Adequate treatment in pregnancy must be started before the fifth month and consists of 10 injections of an arsenical compound and 10 of heavy metal, preferably bismuth.

One other point to remember is that every syphilitic mother must be treated during every pregnancy, even though her reaction to the serologic test may be negative. Twelve per cent[9] of such mothers with a negative Wassermann, treated during a previous pregnancy but not during the subsequent one, delivered living, syphilitic children. Therefore, it is most essential that every syphilitic mother, regardless of the amount of treatment she has had in the past, her physical condition or the status of her present serologic reaction, must receive early and adequate antisyphilitic therapy during each pregnancy, to insure the birth of a living, nonsyphilitic child.

FACILITIES FOR TREATMENT

The private physician plays the major role in this program. He treats 64 per cent[2] of all venereal diseases. The problem is directly and squarely upon his shoulders. Without his full cooperation, control of syphilis and gonorrhea is impossible. Approximately 59 per cent of private physicians treat no venereal diseases while over 50 per cent of all private patients are treated by 5 per cent of the physicians. But even though such a large percentage of physicians treat no venereal diseases, and even though the eye, ear, nose and throat specialist, the surgeon and other specialists do not treat venereal diseases, all are bound to see cases in their practice for diagnosis, if not for treatment. When one in every ten adults has or has had syphilis and when there are over one and one-half million new cases each year of early syphilis and gonorrhea, every physician in this country at some time or another must see some cases. Every practicing physician, therefore, is vitally concerned and is a necessary cog in the machinery to control these diseases.

In this group of patients where, because of youth and low earning capacity, 80 per cent are unable to pay for the cost of treatment, some arrangement must be made to provide free or part pay treatment. The private physician cannot and should not be expected to donate his skill, time, office and equipment as well as the drugs for patients who are unable to pay. Free clinics in our larger municipalities provide treatment for most if not all these patients, but generally no provision is made for their care in the rural areas where syphilis and gonorrhea are almost as prevalent as in urban areas. If we treat only our city cases we are caring for only a portion of our problem.

The cost of a year's adequate treatment for

[9] Cole, H. N., et al.: *Venereal Disease Information*, Washington, 1934, 15:83.

syphilis varies with the location, from a minimum of $25.00 in a public clinic to $485.00 by specialists, with an average for the physician in general practice of $300.00.

In urban areas clinic facilities should be organized to care for all the patients who cannot afford to pay a private physician. In rural areas the problem is more difficult. Antisyphilitic drugs should be furnished free to all physicians so that they may give adequate treatment to both wholly indigent and borderline patients. Another essential service that should be rendered to the physician is free laboratory service, including darkfield examination, serologic tests and the examination of smears for gonococci. The necessity for early diagnosis and treatment to effect a larger number of cures in syphilis makes it mandatory that facilities for darkfield examination of all suspicious lesions be done. This is a highly technical and skilled procedure, one that should be performed only by a trained laboratory technician. Since such a technician is not to be found in every community, use should be made of the indirect darkfield technique. By this method, the physician obtains a specimen of chancre serum by a capillary pipette and sends it to the state laboratory for examination. The great obstacle to the general use of this method is that many physicians do not know how to obtain a good specimen, but this can be overcome by providing postgraduate training and a suitable informative program.

The value of the serologic test as a part of every examination cannot be overestimated, regardless of the physician's specialty. As a routine test on all patients, on patients with suspicious lesions, certainly on all pregnant women and during the course of antisyphilitic therapy, the Wassermann or similar tests should be available to the patient at no cost. The Cooperative Clinical Group in the study of latent[10] syphilis found that 55 per cent of these patients gave no history of infection. The only way to discover latent syphilis is by means of a serologic examination and the physician should be able to have such a test performed without having to consider the cost to the patient.

CASE FINDING AND CASE HOLDING

When an outbreak of typhoid fever occurs, there is an immediate search for the source of infection in water, milk, sea food, etc. This source is eliminated. Similarly, in such contagious diseases as syphilis and gonorrhea, there is the same necessity for finding the source of infection and eliminating it by adequate treatment. Tracing sources of infection may be difficult, but wherever this work has been conscientiously carried out, the results obtained have justified the time and effort spent.

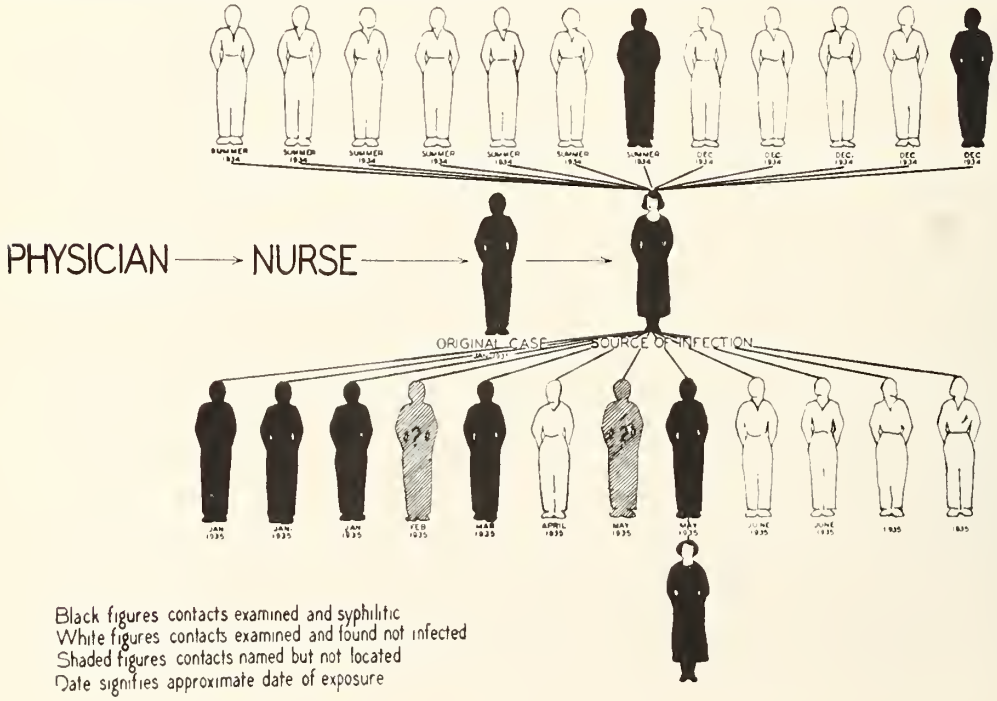
A number of states have adopted this procedure with very good results. When a new case reports to a clinic or private physician, an attempt is made to learn the source of infection and contacts. These people are brought in, examined, and treated if found to be infected.

The accompanying diagram illustrates what can be done through cooperation of the private physician with the local health department. The orig-

[10] Moore, Joseph Earle, et al.: *Venereal Disease Information*, Washington, 1932, 13:329.

THE PRIVATE PHYSICIAN AND CONTACT FOLLOW-UP

Seven cases of syphilis were placed under treatment as a result of this physician's efforts. Follow-up of 26 contacts was carried out under his direction by an investigator from the State Health Department. All infected were treated by private physicians.



From the Division of Social Hygiene, New York State Department of Health

inal case came to a private physician for treatment and the physician learned the source of infection. All 25 contacts named were examined except two, who could not be found. Eight were found to be infected and seven were subsequently treated, who otherwise would probably have continued as infectious sources themselves. The physician should cooperate fully with the health department in carrying out such procedures.

INFORMATIVE AND EDUCATIONAL PROGRAM

Informative and educational procedures form an important part in our efforts to control venereal diseases. They are divided into those for the physician and those for the public. The following recommendations were made by an advisory committee[11] to the Public Health Service:

1. Provision for more effective undergraduate and postgraduate training by medical schools in the clinical management of venereal diseases.
2. Provide subsidies to medical schools and teaching hospitals for teaching and research.
3. Provide postgraduate instruction for the practicing physicians.
4. Disseminate informative literature to physicians in private practice. The monthly journal of the Public Health Service, *Venereal Disease Information*, has been found of extreme value, not only because of its original articles by outstanding men but because of the excellent abstracts from both foreign and domestic journals on all phases of venereal disease.

Education of the public is of the greatest importance, for the average person displays a lack of knowledge concerning venereal diseases that is astounding. A few weeks ago, I met a college graduate, out of school four years, who did not know the difference between gonorrhea and syphilis. These two diseases must be brought into the open. People must be taught to regard them as contagious diseases, like tuberculosis, smallpox, and typhoid fever. The press, radio, magazines, motion pictures and lectures should be used in an effort to tell the public what these two diseases are, what they cause, the necessity for early diagnosis and adequate treatment, and the means of prevention. I need only to cite the example of tuberculosis to demonstrate the value of such procedures in the control of a disease. What proof do we have that the previously mentioned measures will be effective in controlling venereal diseases? The Scandinavian countries have had remarkable success in their program to control syphilis and gonorrhea.[12] They provide free and accessible treatment to all; compulsory treatment for all infectious cases; punishment for anyone who infects another with a venereal disease; and a good educational program.

In our own country we have positive proof of the effectiveness of an adequate program against venereal diseases, exemplified by New York and Massachusetts. Both states have had their programs in effect for many years with the result that they can demonstrate a definite decrease in the number of early infections. Nelson[13] of Massachusetts also reports a decrease of positive or doubtful serologic reports in pregnant women of 9.9 per cent to 2.6 per cent between 1919 and 1934.

CONCLUSIONS

In conclusion, I wish to enumerate very briefly how every physician can do his part in this great war.

1. Reporting of all cases of venereal diseases is a necessary procedure just as it is in typhoid fever or tuberculosis. We must know how many cases we have to learn the extent of the problem, the age, sex, and race. Reporting is necessary also if sources and contacts are to be found, examined and treated, and further if infectious cases lapsed from treatment are to be returned to the physician. In most states the name of the patient is not considered necessary in reporting unless that patient lapses from treatment.

2. It is essential that the physician follow proven, accepted standards of treatment in early cases to render the patient non-infectious when continuous and adequate treatment are so important.

3. The use of a routine serologic test cannot be stressed too strongly. Its value is beyond question. In pregnancy, it must be a part of the first examination—rich or poor patient, early or late stage.

4. The physician-patient relationship is most important, something that cannot be obtained outside of private practice. The patient places himself in your hands, his confidence is entirely yours. At the first interview, tell him of his infection, what the proper therapy is, how long it will take for a cure and the approximate cost, and emphasize the dangers of insufficient or no treatment.

5. The physician must take his rightful place as an educator and teacher in all health problems. It is far better for him, with his scientific knowledge and experience, to tell young people about venereal diseases than for some socially minded but uninformed person to present a lot of untruths and misstatements which only confuse.

6. Finally, cooperation with your state and local health departments will be both beneficial to you and helpful to them in the combined efforts to control venereal diseases. Health departments do not take practice away from you; on the contrary, they should add to your practice through their many and varied educational programs. Make use of them for your free laboratory service, for consultation and for any information you desire and in return, help them by your fullest cooperation. This is not a problem for one man or for one group; it can and must be a united effort.

[11] *Venereal Disease Information*, Washington, Vol. 17, No. 1.

[12] Lomholt, Svend: Decrease of Syphilis in Denmark. *Dermat. Wchnschr.*, Leipzig, Feb. 9, 1935, 100:173.

[13] Nelson, N. A.: The Decreasing Prevalence of Syphilis in Massachusetts. *J. A. M. A.* (Jan. 11), 1936, 106:105.

SOCIOLOGIC ASPECTS OF VENEREAL DISEASE CONTROL

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Hammond

The great American plague is about to be dramatized. The expansive theatre of the United States is to be its auditorium, and the pale white Spirochete has been cast for the stellar role, supported by approximately 683,000 victims of its devastating dominance. Strange that for four hundred years the "board of censors" composed of "old taboos," "lay and professional indifference" and the "conspiracy of silence" have effectively stemmed the public dissemination of enlightenment on this, the most treacherous of human ailments. But now, at last, the great drama of Syphilis is to be presented to the American public in a sustained campaign to halt its ravages. Under the direction of Public Health Surgeon-General Parran, and with the counsel of some five hundred representatives of the medical profession, officers of state medical societies, health officers, specialists, and social service workers, this immense program is to be unfolded. No longer will the policy of suppression of facts concerning this disease prevail. Newspapers will open their columns to the news about "syphilis"; radio broadcasting systems will provide the facilities for the spread of information relative to its many aspects; and no longer will it smirk behind the pseudonym of a "social disease," a "blood disease" or a "bad disease." The gleaming spotlight of publicity is focused on the name "syphilis," and so the curtain rises on the most pretentious program for venereal disease control ever attempted.

Certainly no one can deny the need for such a campaign. Despite the fact that the causative organism has been known for 32 years, the Wassermann reaction has been available for 30 years, and arsphenamine therapy has been in use for 27 years, no other disease has so long been neglected and ignored. No wonder, then, that today it is one of the most prevalent of communicable diseases, and now takes the first place among public health problems.

"Syphilis," defines John Stokes, "is an infectious disease due to the Spirocheta pallida; of great chronicity; systemic from the outset; capable of involving practically every structure of the body in its course; distinguished by florid manifestations on the one hand, and years of completely asymptomatic latency on the other; able to simulate a large proportion of the entities comprising the field of medicine, surgery and its specialties; transmissable to offspring in man; transmissable to certain laboratory animals; and treatable to the point of presumptive—but not, thus far, demonstrable cure by the use of derivatives of arsenic, mercury, bismuth, the iodides and non-specific or fever therapy." If anything has been omitted in this definition to signify that this disease qualifies as public enemy No. 1, then it could but further indicate that it permeates the entire range of general medicine, and of our social and economic life.

When we consider that there are each year more than twice as many new cases of syphilis as scarlet fever, thirteen times as many as diphtheria, twenty-eight times as many as typhoid, one and one-half times as many as tuberculosis; when we are confronted with the astounding fact that there are at least 25,000 fetal deaths from syphilis every year in the United States, and that the reported total deaths from spyhilis exceed the combined deaths of smallpox, measles, scarlet fever, whooping cough and diphtheria; when we are advised that approximately eighteen per cent of the heart disease and eleven per cent of nervous and mental disease deaths are due to syphilis, and that the total registers well over 100,000 each year—surely syphilis ranks with the greatest killers of mankind—syphilis, heart disease, cancer, pneumonia, nephritis, cerebral hemorrhage, and tuberculosis. Neither can these figures indicate the prevalence or seriousness of syphilis since so often the maze of mortality statistics obliterate the causative factor under such headings as chronic myocarditis, apoplexy, cardio-vascular renal disease and others. Nor can morbidity estimates hope to approach the true status of prevalence of this disease since actually thousands are never reported. Its devastating influence in producing permanent disability exceeds by five times that caused by automobile accidents and these in 1934 numbered 107,000.

Blindness in America has 25 per cent of its victims because of syphilis, and in the course of the disease from 25 to 35 per cent of syphilitic persons show distinct ocular lesions or associated mechanism disturbances. According to reliable estimates there is an average of 18,700 cases of paresis under treatment in our state institutions for mental diseases, and the same records indicate that 4,500 deaths per year are due to paresis and 1,100 are due to tabes, and the total disability leading up to this final termination can only be partially estimated. Some 40,000 deaths from cardio-vascular disease caused by syphilis occur every year in the United States, and each death represents a loss of from 19 to 23 years of life. A compilation of reports from prenatal clinics indicates that for groups not separated by race the average rates for syphilis range from 20 to 163 per thousand, and the average incidence of syphilis in all pregnant women has been placed at 8.3 per cent. In the child population as a whole, the incidence of congenital syphilis has been placed at between 3 and 5 per cent.

The widespread opinion that syphilis prevails only among the degraded, the criminals, the delinquents and the filthy, and that their predicament represents their just award has, in large measure, been responsible for the lack of interest in the

suppression of this great plague. Until this distorted view has been corrected, progress in its control must necessarily be slow and hampered. Syphilis in this country is yearly on the increase and it pervades all strata of society. Only 50 per cent of the cases are acquired in venery, and of these the clandestine love affair contributes as many as the commercial prostitute. Parran has indicated that the other 50 per cent are innocently infected, in marriage or congenitally, through the infected eating and drinking utensil, the services of diseased nurse maids, barbers and beauty shop operators, and in the giving of services by dentists, doctors and nurses to infected persons. Stokes has expressed the situation admirably: "Think of syphilis as the wages of sin, as well earned disgrace, as filth, as the badge of immorality, as a necessary defense against the loathesomeness of promiscuity, as a fearful warning against prostitution—and our advantage slips from us. The disease continues to spread wholesale disaster and degeneration while we wrangle over issues that were old when history began and are progressing with desperate slowness to a solution probably many centuries distant. Think of syphilis as a medical and sanitary problem and its last line of defense crumbles before our attack. It can and should be blotted out."

In every walk of life we contact its presence: 42 per 1,000 employees of industry gave positive serologic blood tests; 139 per 1,000 in the United States Navy and Marine Corps were infected; 160 to 170 per 1,000 of the prison population had the disease; 20 per 1,000 of the more responsible white population were found in an active state of the disease; 2 to 5 per 1,000 of college students were serologically positive. Thus in selected population groups there are from 2 to 200 syphilitics per 1,000 population, many of whom have been untreated and all of whom have received an insufficient amount of treatment to render them symptom free and serologically negative. The high annual incidence of known cases seeking treatment, the ratio of early syphilitic patients under treatment to the exposed contacts infected (2:3), and the accumulating number of untreated or inadequately treated individuals with syphilis are the basis for the estimate that there is one out of ten adults in the United States today who has or has had syphilis, many of whom will remain potential treatment problems throughout life. It is indeed time that such a challenge should be met and since no effective social prophylaxis can be undertaken by private physicians, the government has initiated its program for venereal disease control.

For the present it appears that syphilis is to have the spotlight, and that the control of gonorrhea is to occupy the somewhat obscure background. The reasons for this may be summarized in the opinions that one problem at a time should engage the public attention, and that it is better to control syphilis; that prudish resistance to public discussion once removed in the one case, the discussion of the other will more readily follow; that the tragedy of syphilis, the fear of syphilis and its widespread prevalence can be more readily pictured to the public who can then be persuaded to provide the means to control it; that the availability of specific therapy offers a prompt means of control; and that since only limited funds are available for the campaign, it should be expended where it will do the most good.

In substance no one can disagree with this viewpoint, and particularly so when it is recognized that the cost of such a program, if efficiently pursued, would be less than the tax costs for the care of those whose condition now has arisen directly or indirectly from syphilis. However, sight must not be lost of the fact that there are three or four times as many cases of gonorrhea as of syphilis, that it is a recurring cause of economic loss and poor health, and that its residual complications may readily lead to a lifetime of at least partial disability, and in many cases the loss of parenthood to countless men and women. Pelouze has aptly phrased the outlook when he states: "It would seem that by the sheer weight of the misery it produces throughout the world, gonorrhea would force itself upon public notice." Consequently there can be no valid reason for the continued neglect of the control of this problem, and since both syphilis and gonorrhea have origin in the same human relationship, the program for their control should be promoted on a common basis.

No matter where the emphasis may fall, a start has been made in the control of the venereal disease problem, and to its successful outcome every high-minded physician must wholeheartedly subscribe. There has been and will be further evidence of dissatisfaction on the part of many practitioners to the effect that this program represents but another of the attempts of government to invade the field of practice, and that it is but another step toward socialized medicine. We are assured by those with authority to speak that this is not the case; that its objects are only to provide suitable means for the proper diagnosis of the disease and adequate treatment for those unable to pay; that this great national menace cannot be checked by individual physicians and that the state, therefore, is in a vastly better position to carry out an effective program for its control. Whatever the laudatory motives may be, it appears inevitable that state medicine in the care of syphilis is a question solely of time. It is only through this medium that syphilis as a sociological problem can be adequately combated. It is only through this procedure that the poor man can secure adequate treatment. It is only through the intervention of the state that the masses can be at all protected against the ravages of the disease. "If this be treason—then make the most of it"—for certainly the shadow of the "moving finger" can be seen across

the pages of a new chapter in the practice of medicine.

When one inquires into the reasons for this we are confronted by the information that an authoritative survey has shown that 55 per cent of physicians engaged in private practice do not treat syphilis; that of the remainder who do, only a small percentage are adequately trained in the methods for the proper diagnosis and treatment of the disease. Unfamiliarity with the use of the dark-field stage has allowed too many early luetics to progress to the secondary stage before diagnosis has been made. Local antiseptics and cauterizing agents have in too many instances obscured a timely diagnosis. Ectopic chronic ulcerations have been dismissed without either establishing or ruling out syphilis. Improper evaluation of serological tests has resulted in recurrent cases of the disease following inadequate treatment. Failure to utilize the methods at our command in the prevention of congenital syphilis through routine blood tests in all prenatal cases, and their adequate treatment when found positive, has resulted in the continued high rate of congenital and hereditary syphilis. Laxity in properly instructing the early luetic patient as to the true nature of the disease, and adequately following through with intensive sustained treatment for 18 to 24 months irrespective of the negative serology, and of subsequent observation and tests over a period of 3 to 5 years, has resulted in many recurrences and much subsequent misery. The limited recourse to lumbar puncture in the chronic case and the subsequent development of neuro-syphilis has served to aggravate our critics. Failure to keep abreast of the newer concepts of the disease, of the advances made in therapeutic agents, and above all to utilize the methods already at hand as a routine procedure of examination have resulted in many errors of omission and commission in the recognition of this disease.

All these and more have been laid at the door of the individual physician as constituting the necessity for a definite change in the methods of caring for this problem. Nor is this all. Our medical schools, hospitals, clinics, societies and periodicals are blamed for not allotting more time and space for the proper presentation of this subject. And this is true. What interne, excepting a resident in skin and venereal disease, has become familiar with the use of the dark field, or for that matter has ever seen the spirocheta pallida? Few of them. Perhaps there is some food for thought in the fact that slightly more than 50 per cent of all patients with known syphilitic infections are treated in clinics. The average practitioner seldom sees a primary chancre any more. There are at least two reasons for this: The first lies in the fact that the cost of private treatment is too high for the average worker, and the second is that clinic treatment is in general better in quality than that given in private practice. Cost, too, is a prime factor in those inadequately treated patients with recurrences or late manifestations. True, ignorance or sheer wilfulness is responsible in many instances for the spread of the disease, but such a situation only points more definitely the need for some method of control. Parents and social teachers are blamed for premeditated prudish silence about the dangers of this affliction, in the one case often through ignorance and in both cases too often through prudery.

But whatever the cause and wherever the blame may lie, the remedy is to be sought through the institution of radical measures of control. The recent conference on venereal disease control held in Washington, D. C., at the instigation of Surgeon-General Parran already points the way. Out of this conference have come recommendations from the public health aspect of control, suggestions relative to the standardization of treatment and drugs to be employed, advice on the most efficient method of follow up of the venereal disease patient, and counsel on the cooperation of the private physician in the control of venereal disease. In brief they may be summarized as expressing the need to extend treatment to all cases of syphilis without interfering with the personal relationship between patient and physician where this can be maintained. The supplying of adequate social service to determine the economic status of the patient was considered essential. Reporting of venereal diseases by name and address where practical, and elsewhere by number or initials and date of birth, was forcefully presented. Free laboratory service and free drugs, confined to the established preparations, where needed was stressed. Prophylaxis is to be included in the program. The importance of early and continuous treatment and the necessity for the treatment of infected pregnant women was outlined. The necessity for properly trained nurses, social workers, and public health nurses was indicated, and the persistent follow-up of refractory cases stressed. The responsibility of the physician to the patient and the community was indicated for the proper control of venereal disease, and his cooperation in case reporting emphasized. Convenient postage-free forms for this purpose are to be provided as well as safe-guards for confidential and secret keeping of such records. Free drugs where needed, free laboratory services, hospitalization at public expense where indicated and consultation services are to be extended. Post graduate educational facilities are contemplated in the effort to foster cooperation between the machinery of control and the interested physician. And finally, the dissemination of knowledge regarding this disease to the public through all available channels of publicity was repeatedly accentuated.

Such is the gigantic problem in substance which confronts the public health worker, the physician, and the public. If its consummation will eradicate human suffering, curtail chronic invalidism, check the premature deaths, and eliminate the community cost of late syphilis—and such are its objects—then it should and must succeed. In the

words of Dr. Parran, "Syphilis must be the next great plague to go. Our children will hold us criminally careless and incompetent if, with the means at hand, we fail to end this scourge within our generation. This is one contribution we know how to make toward a safer, happier world for them to live in."

137 Rimbach St.

ABSTRACT

TREATMENT MUST BE AUGMENTED BY IMAGINATION TO ERADICATE SYPHILIS

Since man's appetites and instincts drive him on so powerfully in the direction of procreation—and syphilis—it is futile for moralists to hope to eradicate the disease on the basis of morality alone. Too many people have too few religious fears all the time or too few morals most of the time. Fear of disease is likewise a poor ally for morality. Otherwise, since the time of Schaudin's discovery of the spirochete and its life cycle, there has been ample time to have almost eradicated the disease from the civilized world. Fear of the disease appears to be of minor significance except in the syphilophobe, and in such cases it is debatable which is the worse affliction, the disease or the fear of it.

Since Fracastorius, the use of mercury for treatment has been an expectant mechanism for relief or for rendering the syphilitic harmless to others. Arsphenamin was almost hysterically hailed as the complete remedy, but laboratory science soon proved the fallacy. After arsenic came bismuth with less enthusiasm than was the case with either mercury or arsphenamin when first used, but still accepted with gratitude. Variations, in a chemical way, have found their places as neoarsphenamin, silver arsphenamin, sulph-arsphenamin, tryparsamide, acetarzone, mapharsan, the various mercurials and bismuths. These drugs are effectual, yes, but not universally, nor without the expenditure of sufficient time and money to discourage many who might be cured. Those who are not cured make new cases. Heavy metals combined with the professional excellence of the doctor is obviously not the sole remedy for whole nations although they may be for individuals. Syphilis is being neither satisfactorily prevented nor adequately treated.

Public health officers in civilized countries have been trying to find the missing factor of successful eradication of syphilis and in a pitifully few places they appear to be gaining ground. Sweden is one notable example, being successful because it has adequate laws combined with good treatment and, it might well be added, adequate publicity.

It must be faced—publicity is the missing factor. Supply that and control laws will follow; prevention and treatment will make the disease become a rarity in less than one generation.

Obviously, the responsibility for publicity must fall upon those who have been furnishing the greatest opposition toward publicizing this scourge, the radio manager, the lay publisher, the clergyman, the teacher, the civic worker, the parent and even the doctor, named in order of their greatest failure to perform. The legislator will follow in his duty as soon as it becomes clear that he must, not before he really should, or too rapidly. Premature laws are detrimental to a cause.

All these agencies for publicity on syphilis must use sane imagination and create the desire in the public mind to free itself from the enormous financial burden of treatment and the waste of health and happiness. It is not unreasonable to force the blind prudish moralist aside and tell people enough about syphilis so there shall come a time in the social conscience of civilized countries when it shall be immoral for parents to be ignorant of syphilis and unmoral for adolescents to be uninformed about it.—L. D. C., *Urologic and Cutaneous Review*, February, 1937.

PROPHYLAXIS

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The time has come when physicians may speak out and tell what they know concerning venereal diseases, and in a discussion of prophylactic measures against the venereal diseases, only those methods which have proved their efficiency will be considered. Some of the methods advocated for prophylaxis against venereal diseases may be offensive to some individuals because they violate religious sensibilities, or simply because they are repugnant. However, it is the physician's duty to "Hew to the line and let the chips fall where they may."

Gonorrhea, being a sexual and not a hereditary disease, long since would have disappeared from the earth if the people had followed the Biblical command concerning chastity. Since chastity is not universal, and there is no immediate prospect of its becoming universal, the obvious course is to employ the best method at hand to eradicate gonorrhea, and that is to prevent infection taking place (prophylaxis) or cure all cases simultaneously.

EFFICIENCY OF PROPHYLAXIS

There is no doubt that prophylaxis against venereal disease is workable. However, the method of applying prophylaxis brings in many factors that make application difficult. Proof that it is workable is recorded in the story of prophylaxis as practiced in Mexico upon American troops during the so-called Punitive Expedition. In 1916, the United States sent some fourteen thousand soldiers into Mexico, which is said to have a high venereal rate. In consideration of the high venereal rate and the fact that the troops would be quartered near towns, a corral was built to house about thirty prostitutes. These women were examined and treated prophylactically at frequent intervals. They were allowed to receive the men as visitors at stated times. The men, before entering the corral, were examined carefully. After leaving the corral, each man received a prophylactic treatment. This unromantic procedure was very fruitful of results. Over a period of six months, the length of time the corral was in existence, not one man who was admitted to the corral developed a venereal disease. So far as is known, this is the only time in the history of the world that an army was free of venereal disease. The prophylaxis was perfect.

Eighteen years ago the preceding story was told to me by one of the medical officers who accompanied the expedition. Several times since then his statements have been verified by enlisted men who also were in the expedition. About two years ago, an attempt was made to obtain further verification from the Surgeon-General's annual report, and only one small scrap of information was found. In the 1917 report of the Surgeon-General there is frequent mention of venereal and syphilis rates

for 1916, but only one vague mention was made of the corral. It was referred to as a "segregation order" carried out at Durban, Mexico. One can only guess at the reason for omitting the valuable data obtained by the segregation order. My belief is that mention of this work was purposely omitted from the reports because certain well-meaning auxiliary workers took offense at the Army's provision of prophylactic measures.

PROPER TIME TO APPLY PROPHYLAXIS

The ideal time to apply prophylaxis to a man is within two hours after exposure. I have given many prophylactic treatments and have never seen syphilis or venereal disease develop in one who presented himself for treatment within twelve hours after exposure. This experience with prophylaxis is confined to private practice and to two years in the Army. I know that Army records are not that good. In private practice, one does not deal with patients who have to face the fact that should venereal disease appear, after the administration of prophylaxis, they must explain, if not stand trial. I believe in the Army and Navy a man could hardly be expected to testify that he had had an exposure prior to or subsequent to the one for which prophylaxis was administered and for which he had not availed himself of prophylaxis. Through the kindness of one of the medical officers at Fort Benjamin Harrison, I have secured the following data on prophylaxis. The figures are collected from January, 1932, to January, 1937.

Number of cases of gonorrhea	196
Number of cases of chancre	52
Number of cases of chancroid	5
Prophylactic treatments given	6,408

Of the 6,408 men receiving prophylaxis, only 19 developed gonorrhea, 6 developed chancre, and none developed chancroid. Of these, allowing for the possibility that some who developed gonorrhea and chancre had other exposures not admitted, the record seems remarkably good. It is now generally recognized that licensed prostitution does not solve the venereal rate problem. In Indianapolis we hear frequent mention of the fact that we had the lowest venereal rate ever experienced when a certain mayor allowed segregation of prostitutes and instituted periodic examinations. No provision was made for examination of visitors to the houses of prostitution. Perhaps the city did enjoy a low venereal rate during that time but, unfortunately, there is now no way to prove or disprove it. Licensed prostitution has been used extensively abroad, but the method of enforcing regulations is quite different from that attempted here. I believe I am safe in saying that segregated districts in this country are generally tied up with local politics and corruption. Resort keepers are suffered only by paying of tribute and corruption of officials. Some European countries take all such matters out of the hands of local police and entrust them to members of the central police force—that is, Federal officers who have no residence in or connection with the city to which they are assigned for duty.

METHODS OF APPLYING PROPHYLAXIS

In discussing the methods of applying prophylaxis, it is difficult to avoid mentioning the problem of prostitution. It seems reasonable to think that were prostitution under control, the application of prophylaxis could be instituted on resort premises. That the problem is actively discussed is evidenced by the fact that, at the recent Conference on Venereal Disease Control Work held in Washington, an eminent urologist seriously advocated the return of the licensed prostitute with the particular idea in mind of direct supervision and compulsory prophylaxis. His paper brought out much discussion, and the subsequent omission of his suggestions from the general recommendations was merely dodging the issue.

Prophylaxis as practiced in the United States Army is generally accepted as adequate. The applicant for prophylaxis is treated after this fashion:

As soon as possible after exposures, the man reports to the prophylactic station and is instructed to empty his bladder. He then washes the external genitalia with soap and water, dries thoroughly, and applies 30% calomel ointment, particularly to the coronary sulcus, glans, and shaft of the penis. The urethral injection consists of the instillation of 4 cc. of silver nucleanate (20%) or an equal amount of silver protonucleanate (2%). This solution is held in the urethra for six minutes by pressure at the meatus, after which time it is allowed to drip out (not forcibly expressed), and a cotton dressing is applied. The man is instructed to avoid passing his urine for the next four or five hours.

The formula for calomel ointment as used in the United States Army is as follows:

Hydrargyri Chloridum mite	30 parts
Adeps benzoinatus	64 parts
Cera alba U.S.P.	5 parts

That used in the United States Navy is as follows:

Calomel	33 parts
Camphor	2 parts
Phenol	3 parts
Anhyd. Lanolin	39 parts
Benz. lard	20 parts
Beeswax	3 parts

The outline of prophylactic treatment as thus given is certainly effective, but it also certainly is messy and obnoxious. Recently there has been reported[1] a method of injecting a silver salt incorporated in an ointment. Over a period of five years, this method was given a trial and pronounced

[1] Schereschewsky, J. S.: *Arch. Inst. Prophylac.*, Paris, 1933, V, 877.

efficient. It has led me to talk with one of the research physicians connected with a local pharmaceutical house and tests are now being made with an ointment carrying a silver salt. It is hoped that out of his experiments there may come a prophylaxis packet that will be adequately staple so that it can be carried by the retail druggist and can be applied by anyone who is reasonably intelligent and sober. The packet could consist of two gelatine ampules, one to contain 30% calomel ointment and the other a silver salt incorporated within an ointment thin enough to allow injection directly into the urethra. With the cooperation of the American Pharmceutical Association, such a packet could be standardized and perhaps dated, and it should be relatively inexpensive.

At present several prophylactic packets are on sale in drug stores. While these packets are not ideal they are probably better than no prophylaxis. Most of them contain a calomel ointment only. This, of course, is excellent for the prevention of syphilis, but it is of little value against gonorrhea. Soap and water is perhaps the best prophylaxis against chancroid.

PROPHYLACTIC TREATMENT FOR WOMEN

Prophylactic treatment for women entails almost a minor surgical operation. The following procedure is recommended by Dr. J. E. Moore and collaborators:[2]

"In cases of rape, and in some others, there may be occasion for applying early treatment to females. If such occasion should arise, the following procedure is suggested: Have the patient urinate. Place the patient in the lithotomy position. Wash the genitals and adjacent parts with soap and water. Give a douche of 2 quarts of sterile water, temperature 100° F., followed by 2 quarts of 1:2,000 mercuric chlorid solution, and wash external parts with the latter. Dry the vagina and vulva by sponging. Swab the entire vagina, through a speculum, with a 2 per cent protargol solution, or 10 per cent argyrol solution freshly made; reach every fold and especially the posterior vault and external os. Swab the entire vulva in the same way, reaching every recess and endeavoring to facilitate the entrance of the solution into the opening of Skene's ducts and Bartholin's glands. Inject enough of the same solution into the urethra to distend it moderately and let the patient hold her finger (in rubber glove) against the meatus to retain the solution for from three to five minutes. Douche the vagina and vulva with a small amount of sterile water, and sponge dry with gauze. Apply calomel ointment to the cervix, vagina, vulva and adjacent parts, rubbing thoroughly into the recesses and folds of the mucous membranes and skin, and taking at least 10 minutes for the operation. Do not use more than 4 grams (1 dram) of calomel ointment in the vagina. Cover the external parts with oiled silk or waxed paper securely and instruct the patient to allow ointment to remain for several hours before washing the parts."

A. H. Curtis[3] in his textbook gives little space to prophylaxis in females but warns of the dangers of bichloride douches. He ends by saying, "The condom is the most dependable protection against infection."

Perhaps the foregoing brings us to the conclusion that prophylaxis is workable, but how are we to let the public know about it? We seem to be on safe ground when we speak of regimented groups of people (Army and Navy), but we cannot see a way to apply it to civil life. It is no wonder that our teachers are reluctant to educate youngsters concerning sex hygiene when we constantly see the children of physicians who are brought up in ignorance of the principles of sex hygiene. Much can be done by insisting that the druggist sell a standard, simple and effective prophylactic packet. Let it be known that a physician can administer a real preventive if the patient presents himself early after exposure.

Recently the daily papers have given much space to venereal diseases, but little has been said concerning prophylaxis. We are grateful for the well-managed publicity undertaken, but I wish to quote an authority[4] concerning this type of education: "We rejoice, of course, that certain channels are opening—that the press in the United States in a burst of educational fervor is giving generous space and even expert handling and full-page publicity, no longer to the euphemism of 'social disease' only but even to syphilis and gonorrhea. But such effort has a wave-like, ephemeral quality, a flash impressionism, a passing worth. Much more important is the still-unborn systematized, steady pressure of effort in the home, the school, the educational concentration on hygiene, and on intelligent right living. Good influences are surely expanding, permeating. We are even 'going on the air,' but pornography, lubricity and all the forms of literary and cinematic 'frankness' and overstimulation are not giving ground. Taboo is breaking down, but inhibitions are going with it. The real question is, which will get there first? Nothing was ever truer of the good, the worthy in this field of education than the saying, 'You can lead an ass to water, but you cannot make him drink.'"

In other words, how can we have our young people informed on sex matters and have them retain their inhibitions? It is well enough to say that it is the place of the parents to instruct and guide them, but how will we instruct the parents?

[2] Moore, J. E., and collaborators: Technic of Prophylaxis for the Female. *Venereal Disease Information*, Vol. X, No. 2, Feb. 20, 1929, p. 2.

[3] Curtis, A. H.: Textbook of Gynecology. W. B. Saunders Company, Philadelphia, 1934, p. 36.

[4] Stokes, John H.: *Venereal Dis. Information*, Vol. 17, No. 11, November, 1936, p. 331.

Perhaps our teachers can give some help in the way of adult education. Now that the way is prepared by the breaking down of newspaper taboos, are we as physicians prepared to do our part in an educational program? It seems to me that waiting for college age misses too many that need information. Teaching sex hygiene in high school is perhaps not early enough. It is said that the average age of the beginning of sex consciousness is ten. To try to tell a child of ten the advantages of sexual continence means that the narrator must have some special education about the subject.

SUMMARY

(1) The efficiency of venereal prophylaxis is an established thing when given to men by trained personnel. Prophylaxis should be given as near the time of exposure as possible.

(2) Methods of giving prophylaxis are discussed.

(3) Venereal prophylaxis is difficult in women.

(4) Licensed prostitution might permit of better control of contacts, but would make the clandestine contact more inaccessible.

(5) Efforts should be made to inform the public concerning prophylaxis.

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ABSTRACTS

Dr. R. A. Vonderlehr, assistant surgeon-general of the U. S. Public Health Service, (Public Health Reports, Volume 52, Number 4, January 22, 1937, page 103) concludes an article dealing with venereal disease control work as follows:

The evidence which has been accumulated in this report indicates an urgent need for the adoption of the following measures in the campaign against syphilis and gonorrhea in this country:

1. The appointment of a full-time venereal disease control officer in every state department of health.
2. A much more liberal policy with regard to the free distribution of antisyphilitic drugs.
3. More general use of the dark-field examination, either direct or delayed, in the diagnosis of early syphilis.
4. More widespread use of epidemiologic investigations in the control of syphilis.
5. Greater persistence on the part of health officers in the attempt to obtain reliable morbidity and mortality reports.
6. The development of more and better facilities for diagnosis and treatment.
7. The adoption of reasonable standards of efficiency by state health departments before formal recognition is given to clinics for the treatment of syphilis and gonorrhea.
8. A much more liberal allotment of funds for direct expenditures in the control of venereal diseases.

Backache as a Sympton of Syphilis.—Klebe (Die Medizinische Welt, October 31, 1936) calls attention to the fact that backache similar to that common among laborers is often the only conspicuous symptom of a primary syphilitic infection of the portio vaginalis. The pain he attributes to pressure on the lumbo-sacral plexus caused by swollen lymph glands.—*Urologic and Cutaneous Review*, February, 1937, page 144.

DIAGNOSIS OF GONORRHEA AND OF PRIMARY SYPHILIS

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The correct differential diagnosis of gonorrheal infection is essentially the major basic problem of urology. The phobias connected with the disease, the fear of acquiring it, and the fear of not getting well, constitute a psychic problem that is not without actual reason. The prevalent atmosphere of repression and negation that is the product of a ferocious piety and primitive ignorance on the physiology of the sex instinct permits and promulgates surreptitious quackery in fear and ignorance to all phases of the problems of venereal infections.

The intimacies demanded in sexual physiology, the labyrinthal structure of the seminal tract, the psychopathology of sexual repression, the strictly human parasitism of the gonococcus, converge to fabricate a medical problem without parallel particularly in regard to production of a cure.

DIAGNOSIS OF GONORRHEA

There is no specific symptomatology of gonococcus infection of male or female. The recognition of symptoms is relative to the stratum of the subject's hygiene, the size of the meatus, and the perspective the patient may have towards venereal infection. The fear of this disease once aroused may be the only actual symptom. The subject may be in such a state of fright that a vasomotor instability simulating shock may be present. If fears are corroborated by the physician, a severe state of shock may develop.

An itching, sticking, or tickling sensation in the urethra, mucoid adhesions of the meatus, and erythema about the meatus, constitute the earliest symptoms of primary infection. There is no characteristic exudate as to color or quantity. Two or more smears of exudate should be obtained, stained by Gram technique and carefully examined for the classical Gram negative diplococcus of Neisser. Voluntary dehydration and voluntary retention of urine for three to twelve hours may be necessary to obtain sufficient exudate for smears.

The presence of a chancre of the meatus should always be kept in mind. When induration about the meatus is present, and the exudate is serous in character, dark-field examination of the secretions is urgent.

Many forms of non-specific urethral inflammation are confusing in the diagnosing of early phases of gonococcal infection as their exacerbations are produced by sexual excitation and alcoholism. Various forms of chemical urethritis resulting from efforts at prophylaxis may present themselves. Non-specific infections of the urinary tract are commonly discovered when gonorrheal infection is suspected. Sequelae of coitus interruptus are too frequently mistaken for infection phenomena.

Urinalysis, chemical and microscopic, should be routine to eliminate diabetic and crystalline irritations of the urethra.

Examination of the source of exposure is particularly important when data obtained is insufficient, so that abortive treatment may be applied.

Acute posterior urethritis and acute trigonitis may be an early symptom complex when frequent exposure has been present during the incubation period. Acute posterior symptoms may be the earliest complaint among those having had past infections of gonococcus, several days after the normal incubation period of three to ten days.

A careful study of the prostate and seminal vesicles by rectal palpation for analysis of symptoms should be routine procedure. Gentle expression of secretion for wet and stained specimens is indicated when the collection of urethral specimens does not produce information explaining symptomatology.

The gonococcus is a non-motile organism devoid of flagella. It does not produce an endospore. Its morphological range is subject to a great deal of debate, mainly confined to the variation of coccal forms. The typical organism of acute pathology on mucous membranes is a coffee-bean diplococcus approximately one micron in diameter. It is a common observation that there is great variation in size. It is possible that variation in morphology represents variation in strain or variation in growth phase.

There is no specific stain for the gonococcus. Classically it is Gram negative. Standardization of Gram stain is essential. The significance of Gram positive forms is debatable.

The cultural problems of this organism are the subject of many contested interpretations. It is a very difficult problem to many. Pelouze[1] states that it is one of the most difficult procedures in the laboratory in chronic phases of the infection, and that there is a vast difference in obtaining growths in the acute and chronic phases. However, recent study of Cohn[2] indicates a very essential use of culture in diagnosis of vulvo-vaginitis, and likewise of Raven[3] in chronic urethral infections of gonorrheal history.

The complement fixation is very much discredited in this country. In foreign hands it seems to be used with definite clinical value. It would seem to be of particular value in metastatic forms of gonorrheal infection as a diagnostic finding if positive, though many workers claim that it frequently remains positive in the presence of negative evidences of infection in the seminal and urethral tracts.

[1] Pelouze, P. S.: Gonorrhea in the Male and Female. Second Edition, Revised. W. B. Saunders Co., Philadelphia and London, 1932.

[2] Cohn, Alfred: The Importance of Bacteriologic Cultures for the Diagnosis of Gonococcal Vulvovaginitis and Proctitis in Children. *Amer. Jour. Syph., Gon. and Ven. Dis.*

[3] Raven, Clara: Dissociation of the Gonococcus. *Jour. Infectious Dis.* Nov.-Dec., 1934.

The works of Price[4] and Oliver[5] should be studied. Topley[6] should be consulted.

DIAGNOSIS OF PRIMARY SYPHILIS

The classical chancre appears in three to six weeks after an exposure as a more or less painless ulcer having the appearance of a recent abrasion. The exudate is usually serous in character; however, the infiltration base is its most fixed characteristic. All ulcers of the genitalia should be subjected to careful ultra-microscopic study for the Treponema pallida. The technology of the procedure is important in many details. It should be attempted only after careful study and practice. All treatment to lesions should be held in abeyance for twenty-four to forty-eight hours prior to dark-field examination. It is a most careless act to neglect thorough examination of any possible primary lesion before consigning the patient to a history of syphilis. Whether diagnosis is positive or not, serological examination of the blood should be made before treatment is instituted. The treatment of syphilis without serological examination is unfair to the patient. Prognosis depends upon it.

The lesions of latent and recrudescent syphilis, the pyodermias of parasitic infestation, herpetic lesions, ulceration related to lymphatic stasis, trauma, and the neoplastic lesions, constitute a frequent diagnostic problem wherein clinical differentiation from primary luetic infection must be made.

Serological reports should be interpreted with a careful analysis of their significance. Blood should be withdrawn in a chemically clean and sterile syringe that is cool and sent promptly to a properly qualified serologist in a clean container.

The author presents this sketch of this problem only as a glimpse at this step-child of medicine and surgery. Anyone who assumes the professional responsibility of dealing with venereal infection problems, publicly or privately, should consult and study the works of Keyes,[7] Pelouze,[1] Hinman,[8] Herrold,[9] and particularly The Report of the Committee for Survey of Research on Gonococcus and Gonococcal Infections.[10]

445 N. Pennsylvania St.

[4] Price, I. N. Orpwood: The Complement Fixation Test for Gonorrhea. Published by the London County Council, Bookseller, P. S. King and Son, Limited, 14, Great Smith Street, Victoria Street, Westminster, S. W. 1, Agents of the Publications of the London County Council, 1933.

[5] Oliver, John O.: Gonococcus Ecto-Antigen. *Brit. Jour. Ven. Dis.*, July, 1933.

[6] Topley, W. W. C.: An Outline of Immunity. Wm. Wood & Co., Baltimore, 1933.

[7] Keyes and Ferguson: Urology. Sixth edition. D. Appleton-Century Co., New York, 1936.

[8] Hinman, Frank: Principles and Practice of Urology, W. B. Saunders Co., Philadelphia and London, 1935.

[9] Herrold, Russell D.: Altered Environmental Gonococcal Forms and the Probable Mechanism of Cure in Gonorrhea. *Amer. Jour. of Syph., Gon. and Ven. Dis.*, Vol. 20, No. 6, Nov., 1936.

[10] Thomas, Dr. Ruth Boring, and S. Bayne-Jones: Report of the Committee for Survey of Research on the Gonococcus and Gonococcal Infections. Supplement, *Amer. Jour. Syph., Gon., Ven. Dis.*, Vol. 20, No. 1, January, 1936.

A STANDARD TREATMENT OF SYPHILIS

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The title of this paper is misleading, for there can never be a standard method for treating syphilis. Treatment of syphilis must be modified and augmented at times, because of the various stages and the multitudinous manifestations of the disease, together with the individual patient's tolerance to our chemical and other weapons. However, it is possible to outline a basic plan of treatment—one which is as simple as possible and from which one can work, modifying it as necessary to fit any peculiarity of a given patient.

Many plans, all different in their detail, have had their virtues extolled, so that it leaves the busy physician at his wits' end in attempting to decide whether the plan he happens to be using is giving his patient the best possible results. It has always seemed a bit superfluous to me to make the number of injections of this or that drug jump about in irregular numbers of weeks, such as 6 weeks of this, 10 weeks of that, and 4 weeks of something else. It can be much simpler by using equal numbers of weeks in the courses of drugs. This will obviate the necessity of the doctor who has delivered a baby at 4 a. m. and splinted a fracture at 8 a. m., wondering whether the patient at 10 a. m. is on the course of 4 mercury and should change to bismuth or whether he is using the course of 6 bismuths and the patient has 2 more coming before a change is made to 8 neos. This is a little thing, but it can be very annoying if you are quite busy, do not treat a great deal of syphilis, and your system of courses is too complicated.

TREATMENT

This paper does not pretend to offer any methods of treatment for neurosyphilis or syphilis of the newborn. They are separate problems which require considerable deviation from the plan of treatment herein presented, especially as to drugs and general management. Congenital, visceral, and circulatory syphilis may be treated as below outlined with reservations, especially in evaluating definite lesions, which may require modification of neoarsphenamine therapy. A period of preparation with heavy metal should always precede neoarsphenamine therapy in these stages.

Treatment of early syphilis should have for its purpose complete cure, or eradication of all the spirochetes in the body. Here one need have no worry for old syphilitic lesions that might be adversely affected by too rapid healing. Thorough and continuous treatment is indicated, modified only by the patient's general physical condition or intolerance to the drugs used. Sero-negative primary syphilis should have a minimum of one year's treatment. Sero-positive primary syphilis should have a minimum of eighteen months' treatment, and secondary syphilis should have a minimum of two years' treatment.

Treatment of latent or asymptomatic syphilis should have for its purpose the same as early syphilis, though the percentage of cures will drop materially below that of the latter group. In addition to the modifications of treatment mentioned above, treatment here should be modified by preparation of the patient with at least six weeks of treatment with one of the heavy metals before any arsenic is administered. Arsenic should be used sparingly in the aged, if at all. Three years of continuous treatment is advisable if tolerated.

In the above two groups, the minimum length of time of treatment has been specified. Some patients will require more, and this is usually indicated only by the blood and spinal fluid Wassermann reactions.

A spinal puncture and complete examination of the fluid should be done on every case treated some time during the first year of treatment. If your first physical examination suggests the possibility of neurosyphilis, spinal puncture should be done immediately.

SPIROCHETICIDAL DRUGS

Use a few drugs and use them well. Familiarity with antisyphilitic drugs begets expertness in their use. Glib pharmaceutical salesmen will extol the virtues of their new anti-luetic remedy, which may be any one of the host of combinations containing arsenic, mercury, bismuth, and the iodides. They will quote a prepared speech, sometimes almost convincing, of the low toxicity, high spirocheticidal efficiency, ease of administration, painlessness to the patient, and economy to the physician. Before it is safe to accept these new remedies, we must have definite evidence of their efficiency, and this evidence in syphilis requires the observation of their use over a period of years in the human subject. The time used in "trying" some unproved drug may result in loss forever of that invaluable and irreplacable period of time, particularly in early syphilis, when the patient must have the benefit of constant powerful treatment with a proved drug.

1. Neoarsphenamine—Intravenous dosage 0.3 gm. initial and 0.45 gm. thereafter for women; 0.45 gm. initial and 0.6 gm. thereafter for men. Dosage may be varied occasionally to suit extremes of deviation from normal average weight in either sex. It is admitted that arsephenamine is slightly more efficient, but it is felt that this advantage is offset by its higher toxicity and more exacting technique of administration.

2. Mercury—As an example, for intramuscular injection, I use mercury salicylate, one grain weekly. Other mercury compounds may be used with equivalent dosage. I prefer the insoluble compounds, because they are not eliminated rapidly,

but act as a depot from which the mercury is continuously absorbed during a prolonged period of time.

3. Bismuth—An average and full therapeutic intramuscular dose of bismuth is 100 mgms. of the element Bi. This is administered weekly to the average adult. Preparations containing less must be given more frequently and, therefore, necessarily a greater number of total injections is required. I prefer a solution in oil which allows slow, continuous absorption.

4. Iodides—Sodium iodide and potassium iodide per os are equally efficacious, though it seems that the sodium salt is a little better tolerated. Dosage: 10 to 20 grains, given in a suitable vehicle, t. i. d., before meals. Some syphilographers recommend much higher dosage.

All intravenous medication is given very slowly. Intramuscular injections are made in the gluteus maximus, the needle being inserted at the angle of the upper and outer quadrant and inclined inward and downward. Aspiration should always be done before the injection is begun to guard against depositing the drug within a vessel. Following injection, vigorous massage of the area will eliminate much of the frequently resulting pain and soreness.

DRUG REACTIONS

Neoarsphenamine

Observing the following point in the administration of this drug will eliminate many reactions and accidents:

(a) Use only a drug manufactured by a reputable pharmaceutical house.

(b) Dissolve it in at least 10 cc. of sterile distilled water, being certain of its sterility and of its purity of distillation.

(c) Be sure the solution is clear; if it is cloudy, discard it. A cloudy solution is often due to the use of a dirty sterilizer in which the syringe is boiled.

(d) Inject the drug intravenously immediately upon its complete dissolution; do not allow it to stand.

(e) Inject the preparation very slowly, being certain at all times that the needle is well within the vein.

1. *Chills, Fever and Intestinal Symptoms:* These symptoms are most commonly seen following the initial injection of neoarsphenamine and develop within six hours. It is thought to be due to the massive destruction of spirochetes, allowing them to act as toxic foreign bodies. Symptoms consist of chills, fever, headache, vomiting, and diarrhea. It usually lasts no longer than 24 hours. It can be attenuated or avoided by administration of the drug on an empty stomach and by preceding by three days the initial injection of neoarsphenamine with an intramuscular injection of a heavy metal.

2. *Subcutaneous Infiltration:* This is not an unusual accident, and unless great care is taken with every injection made, sooner or later you will get an infiltration of the subcutaneous tissues when least expected. A small tumor appears at the point of the needle and the patient complains of severe pain at the site of injection. Injection must be stopped immediately. Sodium thiosulphate solution in ampules should always be kept on hand for use in this emergency. Using another syringe, this solution (sodium thiosulphate) should be injected freely subcutaneously into and about the area of infiltration. The patient should be instructed to apply local heat as soon as he reaches home, preferably using towels wrung from hot Epsom salts water. The injection of neoarsphenamine may be completed in the other arm.

3. *Herxheimer Reaction:* This reaction is usually observed after the initial injection of neoarsphenamine and is evidenced by a magnification or swelling of the florid secondary lesions or the chancre, as the case may be. Such a reaction needs explanation to the patient or he will think he is getting worse. It is usually of no moment in early cases and the symptoms rapidly subside; but in latent and tertiary syphilis, when lesions often involve vital structures, such a reaction may be tragic. Therefore, in latent and tertiary syphilis it is important to prepare the patient with several injections of the heavy metals before neoarsphenamine is used.

4. *Cutaneous Reactions:* Most common is the exfoliative dermatitis, which can be a very serious complication if not observed early. Before each injection of neoarsphenamine, the patient should be observed for any small patches of eczema and asked if he has observed any unusual itching of the skin, particularly of the palms or soles. If either of these are present, discontinue neoarsphenamine immediately and when they have subsided, resume the drug in very small doses and with great caution. Daily doses of sodium thiosulphate solution intravenously are useful in this complication.

5. *Nitritoid Crisis:* This reaction occurs during or immediately following injection. It is often mild, exhibiting only flushing of the face followed by some pallor about the mouth and repeated swallowing. On the other hand, it may assume alarming proportions, as evidenced by swelling of the lips and eyes, stridor, marked pallor, and weak pulse. The patient has a sensation of grave anxiety and impending death. Convulsions may occur, as may also unconsciousness. Recovery usually ensues gradually, though death may occur, especially in old and debilitated individuals. The cause of this reaction is debatable, several different theories having been advanced. Ten minims of adrenalin subcutaneously usually suffice for treatment of this reaction, though an additional 5 minims, given intravenously, are sometimes advisable when the reaction is severe. Adrenalin should always be

instantly available for this purpose. Stokes suggests a preliminary subcutaneous injection of 1/50 grain of atropine 20 minutes before administration of neoarsphenamine as a prophylaxis.

Mercury

Four conditions follow which should be watched for while administering mercury:

1. Mercurial stomatitis as evidenced by inflamed, sore and painful gums, and sore, red tongue. Mouth hygiene and dental care are important during mercury therapy.

2. Gastro-intestinal symptoms as evidenced by cramps, diarrhea, bloody stools, and colic.

3. Kidney damage, as revealed by the presence of albumin in the urine.

4. Cutaneous eruptions, which are many and varied.

Treatment of all these types of reactions is directed toward cessation of therapy, rapid elimination of the mercury, and local symptomatic therapy.

Iodides

Iodism occurs occasionally during iodide therapy. The most common sign of iodism is coryza, with snuffling, upper respiratory discharge, and other symptoms of acute head cold. Skin eruptions due to iodides are many, though the most common resembles ordinary acne vulgaris. Other complications of iodide therapy occur but are rare. Treatment consists of withdrawal of the drug and symptomatic therapy.

THE WASSERMANN REACTION

When a competent serologist returns a definitely four-plus blood Wassermann test, your patient has syphilis. Should the patient be clinically negative and give a negative history, the blood test should be verified by one or more other laboratories of good repute. A lesser degree of positivity also demands further investigation. Known syphilitics with weakly positive reactions should have further treatment. A negative Wassermann reaction does not exclude syphilis. If clinical symptoms still suggest syphilis, a provocative test is in order. This is done by injecting 0.6 gms. neoarsphenamine intravenously and drawing blood for a Wassermann test 48 hours later. If this is negative, repeat the procedure in five days. A third trial may be used. This is of value when a definitely positive reaction results; but otherwise, syphilis has still not been excluded.

The Wassermann test is of great value in conduction of treatment, particularly when the test is done quantitatively. It is not generally understood, since a four-plus reaction is the strongest reading that is made in the laboratory, that a syphilitic blood may be relatively 6-plus or 16-plus or 25-plus. Treatment may reduce a 16-plus blood test down to 8-plus, yet the ordinary Wassermann test will still read 4-plus. This becomes very discouraging to both patient and physician when it is not understood. If a quantitative Wassermann is ordered, several tests are made on the same blood, using reduced quantities of the serum and thus bringing out this reduction in positivity illustrated above.

Early syphilis, well treated, will often result in a negative Wassermann test following the first course of therapy; however, treatment must be continued through the minimum lengths of time recommended. If it is not, the Wassermann test is likely to revert to positive, frequently in only a short time. Valuable time has, therefore, been lost. After the recommended period of treatment, if the Wassermann test is negative, treatment is discontinued. However, vigilant observation must continue. Frequent Wassermann tests are essential during the succeeding year and less frequently in subsequent years. I recommend blood Wassermann tests every two months following cessation of treatment during the first year, twice yearly during the following four years, and annually thereafter for the duration of life.

PLAN OF THERAPY

The plan of therapy offered here should be regarded as a basic plan, a mark at which to aim; it is one which, if carried out in its entirety in accordance with our conceptions as to length of treatment time for the various stages, can be considered intensive therapy. At no time is the patient on one drug alone and no drug is used continuously over a long period of time, thereby avoiding drug-fastness. Its unit number is twelve, making computation and administration simple. It often needs modification, especially as to preparatory injections of the heavy metals to avoid Herxheimer reactions. It is well to use an injection of mercury or bismuth three days before the initial neoarsphenamine in primary or secondary syphilis. Older syphilis should have more, in direct proportion to severity and clinical findings:

First Year of Treatment:

Twelve weekly injections of 100 mgms. bismuth intramuscularly, and neoarsphenamine intravenously (0.45 gm. for women and 0.6 gm. for men). These two injections per week may be administered during the same office call.

Draw blood for Wassermann test before beginning the next course which consists of:

Twelve weekly injections of mercury intramuscularly (1 grain mercury salicylate or equivalent), and 10 to 20 grains sodium iodide, t.i.d., per os, during these twelve weeks as tolerated.

The two above mentioned 12-week periods are repeated, thus making a total of 48 weeks, or approximately one year of continuous treatment.

Additional treatment, as recommended earlier in this paper, consists of repeating these two twelve-week periods, drawing blood for a Wassermann test at the beginning of each mercury course. The treatment is continuous; there are no rest periods.

SUMMARY AND CONCLUSIONS

1. A simple basic plan of treatment of syphilis is desirable for the average physician.

2. Neurosyphilis and congenital syphilis are not considered herein.

3. Objects and time of treatment are considered in the various stages of syphilis.

4. The more common reactions to spirocheticidal drugs are reviewed.

5. The Wassermann test is valuable, not only in diagnosis, but also as a guide to treatment.

6. A simple basic scheme of treatment is described, which is continuous and uses several antiluetic drugs in combination, being subject to such modification as a given case of syphilis would seem to warrant.

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ABSTRACTS

"As the laity become conscious of the prevalence and social importance of this disease (syphilis) and the physician's ability to control it, a no less dogged attack will be made upon the spirocheta pallida than has been responsible for the retreat of the tubercle bacillus." — *Therapeutic Notes*, Parke-Davis & Co., November, 1936, p. 324.

A Very Recent Experience.—In this connection it may be of interest to state that at Los Angeles on December 19, 1936, was formed the Southern California Association for the Study and Prevention of Syphilis and Gonorrhea. It was a tribute to the intelligence and earnestness of the large lay group of club women who were present to take part in the organization of the society, that they urged an abatement of the hush-hush policy about the diseases, and that, after much discussion, the names syphilis and gonorrhea were included in the title of the Association; and this, in spite of the fact that press representatives who were present stated that their publications could give no publicity with those words attached! Which again leads us to think that we are on the eve of a long-desired successful battle against a disease which the Scandinavian countries, for instance, have been able to subjugate, and which should, therefore, be the more possible for us to vanquish, at least in good part. —*California and Western Medicine*, Vol. 46, No. 1, p. 4.

THE MANAGEMENT OF ACUTE GONORRHEA

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The present awakened public interest in the subject of gonorrhea and the common sense manner in which the newspapers, radio and other methods of news dissemination have aided in presenting the problem to the lay people, has placed a renewed responsibility upon the medical profession.

The saying that gonorrhea is the poorest treated of all common diseases is so universally heard and unfortunately so near the truth that it constitutes not only a reproach to the profession but a compelling mandate to survey the causes of our failure in handling this extremely important disease and to correct the reasons for this failure.

Perhaps the greatest single factor in our past inability even seriously to retard the ravages of gonorrhea is the refusal of the great majority of physicians to take the disease seriously. The fact is self-evident that by far the greatest percentage of the cases are and will continue to be treated by the man doing general practice. It would be impossible for the vast number of gonorrheics to be treated by men trained in urology, even if they desired such treatment.

However, until the doctor consents to take a sincere interest in the patient suffering with gonorrhea, make a clean cut diagnosis and apply treatment based upon sane and reasonable grounds, very little can be hoped for.

Our second greatest mistake probably has been our blind reliance upon the practice of injecting strong chemicals for direct slaughter of gonococci in the urethra and only slightly less damaging is the habit of allowing the patient to go for prolonged periods without direct contact with the physician. Daily visits during the acute stage are very important in carrying out proper treatment.

A brief consideration of the pathology will help us in ridding our minds of some of the age-old misconceptions concerning gonorrhea.

The weight of evidence tends to show that extension of the disease is by surface progression of gonococci, a fact to be remembered in considering such complications as prostatitis and epididymitis. However, tissue penetration by gonococci takes place in a perpendicular manner, the organisms penetrating between the epithelial cells, along the intercellular spaces. This latter takes place so rapidly that within 36 hours after infection the bacteria are usually well into the deeper submucosal spaces.

One look at a pathologic section of acutely infected urethra, showing the tissue penetration of gonococci extending down to the submucosal spaces, will suffice to chill the ardor of the most enthusiastic advocates of industrious washing of the inflamed surface mucosa with powerful solutions and

will eloquently argue the advantage of gentle use of solutions so mild that their chief effect is that of stimulating beneficial tissue reaction, with direct destruction of gonococci on the surface an incidental and secondary consideration.

Surface changes in the early stages are found most pronounced about the openings of the glands of Littre and the crypts of Morgagni. Swelling of these openings often occludes them, causing retention of their purulent products, hence the value of a gentle preliminary urethral irrigation of weak potassium permanganate solution, to cleanse the surface mucosa and loosen and remove the mucopurulent plugs occluding the openings of these glands and lacunae.

In some severe infections, and particularly after rough and injudicious treatment, there is more or less extensive round cell submucosal infiltration. This may resolve or may go on to stricture formation.

The incubation period of the gonococcus is two to nine days and it may be stated with certainty that urethral discharges appearing in less than 48 hours are not due to newly-acquired gonorrhea. Such a discharge may, however, be a toxin response from an older latent infection.

Gonorrheal infection in the adult is for all practical purposes the result of sexual contact in every case. The many explanations offered, usually by married victims, are both plausible and ingenious but the physician who allows himself to be convinced by them is placing a needless handicap upon his perspective at the beginning. Our attitude should be that our concern is with the treatment and cure of the infection, rather than with the moral questions involved in the patient's manner of acquiring his disease.

The diagnosis of gonorrhea is usually easy but is never positive unless a smear is taken and microscopic examination of the stained specimen done.

Non-specific urethral discharges are more common than is usually realized and may be due to chemical irritation of the urethra caused by prophylactic injections, to an irritating vaginal secretion, prostatitis of hematogenous origin or even kidney infection. Hence it is not only unscientific but often dangerous to forego microscopic study of the urethral discharge.

The Gram stain is the most reliable and can be done in less than five minutes. A thin smear of the secretion is obtained on a slide and passed through a Bunsen flame or ordinary match flame several times for fixation. Gentian violet is then applied for 1½ minutes and washed off with tap water. Gram's iodine solution is next applied for one minute, followed by washing with acetone (acid-alcohol) for decolorization. The slide is then washed with tap water and carbolfuchsin applied for one minute, after which it can again be washed in water, dried and examined.

TREATMENT OF ACUTE ANTERIOR URETHRITIS

After an accurate diagnosis has been made, the facts of the situation should be laid before the patient. It is vitally necessary to enlist the patient's complete cooperation and this cannot be done unless we carefully explain the important part his conduct will play in the development of complications or freedom from them.

No worthwhile evidence exists that abstinence from meats, fried foods, tea or coffee, salt or any of the many other popular dietary restrictions have any effect upon the course of the disease. Alcohol, sexual excitement and excessive physical exertion are the only things which need to be prohibited and a full diet of easily digested food will make a happier and better nourished patient. Large quantities of water should be taken during the day but fluids should not be forced during the evening hours, as frequent night urination will interfere with the patient's much needed rest.

Regarding oral medication for anterior urethritis, very few of the countless remedies used have any real value. Sandalwood oil seems to reduce the urethral irritation and is justifiable during the first two or three weeks of the disease. The various azo dye preparations, methylene blue and other urinary antiseptics have little effect other than to impress the patient by the vari-colored urinary hues which they produce. The cost of these drugs to the patient is out of all proportion to the results obtained.

The value of soap and water as a means of preventing conjunctival infection should be impressed upon the patient, and thorough washing of the hands after handling the infected parts or soiled dressings should be insisted upon.

Any type of penile dressing that does not interfere with drainage is satisfactory. The practice of placing cotton over the meatus, sealing it tightly and forcing infection backward into the deep urethra, cannot be too strongly condemned. The ordinary muslin sanitary bag is satisfactory and can be obtained at any drug store.

In considering the solutions and methods to be used in treatment of acute anterior urethritis, only those which the writer has used, and knows from experience to be safe and effective, will be discussed.

The amount and character of the urethral discharge is noted at each visit, after which the patient is directed to pass his urine into two glasses, not less than two or three ounces being voided in the first glass. Briefly, in anterior urethritis the first urine is cloudy while the second glass is clear. If posterior urethritis is present the first urine is cloudy and the second is hazy or cloudy. The two glass test is valuable in following the progress of cure from day to day; in fact, without it, it is difficult to see how a case could be treated intelligently.

The patient is next asked to stand close to a low sink or basin and the anterior urethra is copiously irrigated with a warm potassium permanganate

solution, the strength of which should not be greater than 1:8,000 or at most 1:5,000. I routinely use 1:8,000 strength and find it very satisfactory. This approximate strength can be made by dissolving a ½ grain tablet of the drug in eight ounces of water. The solution should be warm and the irrigation carried out either with a blunt-tipped urethral syringe or an irrigator, the bowl of which should not be over 2½ feet above the level of the urethra. Great care must be taken to avoid high intra-urethral pressures during this irrigation, as they almost invariably cause extension of the infection to the deep urethra and very often to the epididymis also. If a syringe is used, not more than two to three cc. of solution should be injected at one time. This will avoid forcing the cut-off muscle and extending the infection to the deep urethra.

After the above preliminary irrigation, about ½ dram of neutral acriflavine 1:8,000 or metaphen in oil 1:5,000 is injected and the meatus is held by the patient for five minutes. Occasionally neosilvol 5%, Silvogon 1:2,000 or Protargol 0.25% is used, as it seems that at times when improvement ceases on one of these drugs substitution of one of the others causes immediate acceleration of the curative process.

The above treatment should be carried out daily, although in a few hyperacute cases the copious preliminary irrigation with potassium permanganate cannot be used for the first few days. Here one or two gentle flushings of the anterior urethra with warm permanganate solution is done, followed by careful injection of the weak acriflavine or silver salt.

While it is occasionally found necessary to give two treatments daily, the vast majority of cases do distinctly better on one treatment. Over-stimulation of the mucosa causes an increase in the discharge and depletes the vitality of the epithelium. Of course no instruments or applicators of any kind should be passed into the urethra during the acute stages of the infection.

In favorable cases treated by the physician the discharge usually ceases in ten days to two weeks, when the treatments may be given at intervals of two to three days until the urine becomes clear.

Treatment carried out by the patient should be absolutely avoided if possible during the acute stages of gonorrhea. The physician should see and treat the patient daily or on alternating days. When treatment is entrusted to the patient before the infection has become subacute or chronic, involvement of the deeper structures is almost inevitable.

If there is no alternative, a ⅛ or ¼ ounce blunt-tipped bulb glass syringe is ordered for the patient and one of the solutions mentioned above. He is usually instructed to use the solution twice daily, morning and night. He is told always to void just before treating himself and then to inject approximately ½ dram into the urethra, retaining it for five minutes by holding the meatus closed.

It is wise always to explain the symptoms of beginning posterior urethritis and epididymitis and warn the patient to cease self-treatment at once if they appear and communicate with his doctor.

Even on the most careful management the posterior urethra is involved in a majority of the cases, certainy 75% to 85%. The prostate is also infected in every case of posterior urethritis and this fact must never be lost sight of. The onset of deep urethritis is heralded by a marked increase in the frequency and discomfort on urination, accompanied by terminal tenesmus and often terminal hematuria. Occasionally there are chills and fever also but these are not the rule and usually mean that a marked degree of acute prostatitis is also present.

The appearance of a few drops of bright red blood at the end of urination in cases of posterior urethritis often causes the patient to become greatly upset but he can be assured that this will disappear in 24 to 48 hours of proper treatment by the physician and exemplary conduct on his part.

All local treatment is immediately stopped if posterior urethritis develops, and is not resumed until all frequency, urgency and tenesmus have disappeared. The treatment of acute deep urethritis consists of as much rest as possible, hot rectal douches and hot sitz baths and oral medication directed toward relieving the tenesmus and frequency. The usual combinations of santal oil, potassium citrate and tincture hyocyamus or belladonna control these symptoms satisfactorily.

Acute prostatitis is treated by cessation of all urethral treatment, avoidance of trauma to the gland by frequent or rough digital examination, and rest, hot rectal douches and hot sitz baths. Sedatives are in order here and I often use a rectal suppository containing opium and belladonna.

Acute epididymitis is in almost every case caused by injudicious treatment or infraction by the patient of the rules against alcohol, sexual excitement or too strenuous physical exertion.

If epididymitis develops the patient should immediately be placed on bed rest. Elevation of the scrotum is the first essential in relieving pain and checking the acute process. This is best accomplished by placing the thighs close together and bridging them across with several strips of wide adhesive. When tightly placed this makes an excellent support for the scrotum and relieves pain to a surprising extent. A poultice of lead water and laudanum plus an ice cap complete the local measures and usually bring about rapid relief. Sedatives by mouth are also used, of coures, and occasionally morphine is necessary.

Calcium gluconate and other similar preparations have not lived up to expectations in my experience and I have given up their use. Foreign proteins seem to be be more effective but their help has not been outstanding.

If the above measures do not bring about very definite alleviation of the pain within 24 hours, and at least keep the swelling from increasing, it has been my experience that epididymotomy is the best alternative. It halts the acute process abruptly and shortens the period of convalescence. The damage to the epididymal tubules is probably less from the multiple fine punctures done in this procedure than following a severe and protracted inflammation.

In the milder attacks of epididymitis a scrotal suspensory will often give sufficient elevation and fixation of the scrotum for relief, particularly if re-inforced and held in place by several strips of two-inch adhesive passed underneath the suspensory and up on either side of the abdomen.

The tests for cure in gonorrhea will not be taken up here as this difficult subject lies more in the province of chronic gonorrhea.

Acute gonorrhea in the female is essentially a self-limited phase of her infection. It subsides in two to six weeks on bed rest (if possible), sedatives and very low pressure douches. In hyperacute cases all douches are omitted, as the danger of salpingitis is too great.

The use of intravenous medication in the treatment of acute gonorrhea has not proved of any definite value in my hands, and it does not appear to be based upon a sound rationale. This applies to hydrochloric acid, intravenous mercurochrome and the many preparations of methenamine now sold for this purpose. Gonococcal vaccines should not be used in acute gonorrhea except in the occasional case where improvement becomes stationary, and then in very small doses, as there is great danger of causing flare-ups and complications.

Concerning newer developments in the treatment of gonorrhea, the two holding greatest hope for the future are the use of artificial fever therapy and the biologic products, such as the bouillon filtrate of Corbus-Ferry.

The Kettering hypertherm is the type used by the majority of clinics where work has been done on artificial fever therapy. The apparatus consists of a rather elaborate and expensive cabinet into which the patient is placed with the head only outside. The patient's temperature is raised by means of recirculated hot, moist air. The degree and duration of temperature is accurately controlled and the patient is under the constant supervision of a physician or a nurse trained in this work.

The originators of this cabinet warn that the method is strictly a hospital or institutional procedure and must be used only by trained personnel. The cases must also be selected; the method should not be used in any patient who would not be considered a fair risk for surgery, as deaths have already occurred during the treatment.

Acute urethritis does not seem to respond as well as the chronic infections but very encouraging results have been obtained even in acute cases, and in those not cured the results of subsequent treatment by standard methods are much better than in cases not subjected to the artificial fever therapy.

While this method will probably never be practical for the vast majority of cases, it gives hope of being of great value in treating special cases, such as married men or women, where rapid cure is demanded, regardless of cost or the necessity of hospitalization. Several cases of gonorrheal ophthalmitis have been cured in one or two treatments, and if no other use were made of the apparatus this would more than justify its existence.

As to the use of gonococcus bouillon filtrate (Corbus-Ferry), experience has not so far yielded any definite answer as to the ultimate value of this biologic product. Pelouze and several other investigators deny that the gonococcus produces an exotoxin such as the filtrate is theoretically supposed to contain.

I have used the bouillon filtrate in practically all cases for the past 1½ years, as a supplement to the standard treatment, and have seen only three or four cases in which it seemed that the filtrate played any outstanding part in bringing about a cure.

SUMMARY

1. The medical profession should renew its interest in gonorrhea and treat it as scientifically as it does other diseases.

2. The anterior urethra should be treated gently and with solutions far weaker than has been the usual custom.

3. Short cuts to cure should be abandoned, as they usually lead to complications and chronicity.

4. The standard methods of treatment, when properly carried out, are superior to reliance upon vaccines or bouillon filtrates alone.

5. Artificial fever therapy is unquestionably valuable in selected cases.

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ABSTRACT

REASONS FOR INCREASE IN SYPHILIS

As to the reasons for syphilis increase in the United States, I believe they are as follows:

1. Lack of central coordination and cooperation of the 48 states of this enormous country, in syphilis control. Each state has its own rule, and interests are not uniform.

2. Most early luetics (60 per cent) tend to gravitate to the general practitioners, who are unsatisfactorily trained in syphilology.

3. Tracing of contacts, especially by the general practitioner, is inefficient.

4. Inadequate program of control, as evidenced by insufficient free equipment and treatment. Taboo of public discussion, and lack of education of the doctor and the public in the field of syphilis.

5. Alcohol and illegal prostitution are factors. Too often are "pick-ups" named as contacts.

Better control and intensive education are the answers to the problem. If possible in Australia, Scandinavia, and England, it should be possible here and everywhere.—Part of a letter from W. D. Wheeler, M.D., Boston, Massachusetts, published in *The Urologic and Cutaneous Review*, February, 1937, p. 130.

THE TREATMENT OF CHRONIC GONORRHEA IN THE MALE

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A gonorrheal urethritis in the male becomes chronic when the acute symptoms have subsided and there remains but a moderate or slight urethral discharge which persists and contains gonococci. The subsidence of the symptoms indicates that the previously generalized urethral inflammation has become more or less localized to areas of erosion or ulceration of the urethral mucosa or to inflammation of the glandular structures in or about the urethra. Such clinical and pathological evidences of chronicity, when they do develop, appear about the third or fourth month of the disease.

The treatment of chronic gonorrhea in the male would be simpler, and the disease would be less serious, if the disappearance of the acute symptoms and the lessening of the amount of discharge but indicated a freeing of the urethra of the gonococcus. Instead, such a patient, with but a slight morning discharge and with but a few shreds or flakes in his urine, may reinfect himself—an acute urethritis resulting—or he may transmit the disease without his having had such a relapse. Transmission of gonorrhea by the male occurs almost always during the chronic stage of the infection. The male is less frequently the source of a gonorrheal infection, yet chronic gonorrhea is more consistently infective in man than in woman. Pelouze states that of the married men "who have gonorrhea before or after matrimony, forty-five per cent will infect their wives," and many of these husbands do not realize that the remaining slight urethral discharge is still infectious.

Chronic gonorrhea in the male may be expected to occur when the patient has had most careful medical attention, under satisfactory conditions of treatment, in from 15% to 20% of the cases of acute gonorrhea. In those patients with an acute gonorrheal infection who are less fortunate in their medical care, and in those who cooperate poorly in their treatment, probably a chronic gonorrhea will develop in from 60% to 70% of the cases.

The duration of a chronic gonorrhea varies widely in individual cases. The gonococcus most often will not be present in the urethral discharge after one or two years; however, they may remain sealed off in a gland for many years, where they are a possible source of reinfection or transmission of the disease.

The development of chronicity in an acute gonorrhea is favored in certain individuals by their seeming inability to develop any local immunity to the disease and by a debilitated, poor physical condition. Also a small urethral meatus, preventing the free flow of the discharge from the urethra, is often responsible for a chronic infection developing. Previous gonorrheal infections and moral lapses of the patient during the subsiding stage of his acute infection, as the use of alcohol, the indulgence in coitus or masturbation, render relapses and chronicity more likely. However, the most frequent cause of a chronic gonorrhea in the male is inefficient treatment due to indifferent care, or, less often, to over-treatment during the acute stage of the infection.

Demonstration of the gonococcus in the urethral secretions is necessary for a diagnosis of chronic gonorrhea. Post-gonorrheal urethral lesions with a gleety discharge free of gonococci should be carefully differentiated from a chronic gonorrhea. Repeated careful search for the gonococcus, by stain or culture, is required before such a differential diagnosis is made.

A smear made from the urethral discharge or from the shreds in the urine should be examined for gonococci. Such an examination of the early morning discharge may demonstrate their presence while secretions collected at other times of the day will prove negative. While the palpation of small shot-like glands, indurated areas and points of tenderness or swelling along the urethra are but presumptive evidence of a chronic gonorrhea, massage of these may result in a purulent expressage containing gonococci. The prostate is frequently involved in a chronic gonorrhea and it should be palpated per rectum for inflammatory variations from the normal. Any secretions expressed by massage of the prostate and the seminal vesicles should be examined in the fresh, wet smear for pus, blood or other formed elements, and when dried the smear should be stained and examined for gonococci. While the gonococcus will seldom be found in the prostatic secretion, a prostatitis with the history of a recent acute gonorrhea, or in the presence of a chronic gonorrhea, should be considered gonorrheal in nature insofar as the management of the case is concerned. Urethral instrumentation should not be undertaken during the subsiding period of an acute gonorrhea or in a chronic gonorrhea until repeated examinations have been negative for the gonococcus.

The two-glass test of the voided urine is of sufficient value to merit special attention. In the test, compare the turbidity, the presence and character of the shreds, etc., in the two glasses. In a chronic anterior gonorrheal urethritis most often only the first glass will contain shreds and flakes, and the second glass will be clear. In a chronic posterior gonorrheal urethritis, both glasses may be turbid, or if the urethral discharge is slight, shreds may be limited to the first glass. The two-glass test is one of the means of estimating the effect of the treatment and careful notations of these findings should frequently be made in treating a chronic gonorrhea.

A chronic gonorrhea may be limited to the anterior urethra. While the discharge may be abundant and contain many gonococci, frequently it is but a slight muco-purulent drop, most often appearing only in the morning, with but few gonococci

present. The second glass will be clear while the first glass will contain shreds of varying size and length. There are inflammatory changes about the ducts of the urethral glands which interfere with their drainage as well as isolated granulating areas on the surface of the urethra.

The first indication in the treatment is to rid the urethra of the viable gonococci present. In accomplishing this the inflammatory reaction about the ducts of the glands will subside and the gland will drain satisfactorily; also the ulcerated, eroded mucosa will heal and the post-gonorrheal lesion remaining will be directly dependent upon the amount of tissue destruction which has taken place.

In the presence of viable gonococci, an injection should be employed. There is no drug for this purpose which is specific in its action and all will at times prove disappointing. Care should be taken not to employ strong solutions which may defeat their purpose by irritating the already inflamed urethra and favor extension and relapse of this infection. Preparations of silver or mercury and astringent injections later in the disease are most often employed. Protargol in one-fourth to one-half per cent solution, and oxycyanide mercury in 1/10,000 to 1/5,000 strength, zinc sulphate or a solution of zinc iodide and zinc chloride are probably most often injected. The injection may be made once or twice daily, the patient always voiding just before treatment. One-eighth of an ounce of the solution is most often injected, the medication being held in the urethra for two or three minutes. The favored solutions used in the anterior urethra by gravity are 1/7,000 potassium manganate or 1/5,000 strength of silver nitrate. In urethral injections and irrigations in chronic anterior urethritis, an attempt is made to limit them to the anterior urethra. After the first glass has been cleared of all except an occasional shred, and any remaining discharge has been found negative by repeated examination for gonococci, a urethral steel sound may be passed. This should be gently done and should be followed by an irrigation with one of the mildly antiseptic solutions indicated.

Acute posterior gonococcal urethritis may not be followed by a chronic infection of the posterior urethra and a chronic posterior urethritis may be non-gonorrheal in origin. The history of a previous acute gonorrhea, evidences of inflammation of the posterior urethra or of the surrounding glands, and the presence of gonococci in the discharge are necessary in making a diagnosis. Both glasses may contain shreds, the degree of turbidity depending upon the amount of discharge present.

With the subsidence of the acute posterior involvement, the urinary frequency, dysuria, etc., disappear but leave behind usually a varying degree of discomfort which is referred to the end of the penis, into the testicles, the perineum, etc. Not infrequently there is interference with the sexual function. There is almost always an involvement of the prostate in chronic posterior gonorrheal urethritis. The expressage following massage of the prostate will contain pus, and the gland is often tender and feels slightly boggy to the touch. This prostatic infection is a frequent cause of recurrent urethral infections, of the transmission of the disease, of impaired general health and, with the gonorrheal changes in and about the verumontanum and seminal vesicles, contributes to the sexual inefficiency of the patient.

The drugs employed in the local treatment of chronic posterior gonorrheal urethritis are the same as those used in chronic anterior gonorrheal urethritis excepting in the former the irrigations are intravesical instead of being limited to the anterior urethra. In addition, however, the prostatitis is treated by massage. Depending upon the local tenderness and soreness of the prostate and upon the systemic reaction following massage, the treatments are most often given in from five to seven-day intervals. While the gland is massaged daily, or twice daily by some, it would seem that less frequent treatment is more generally accepted as proper. The massage should be gentle and the pressure exerted from above downward. Too vigorous massage may be followed by an epididymitis even in the well-established chronic case. Massage is usually given with the patient's bladder full of urine or of potassium permanganate solution which latter was introduced immediately preceeding the massage. After the massage, the urethra is cleansed by the patient's emptying the bladder.

The same rules govern the passage of instruments in chronic posterior gonorrhea as in chronic gonorrhea of the anterior urethra. Remaining strictures will be treated by sounding and a gleety discharge free of gonococci will frequently be cured by systematic dilation of an existing urethral stricture by steel sounds. During the treatment of chronic posterior gonorrhea as well as for post-gonorrheal changes about the verumontanum, local treatment of the posterior urethra, by instillations or topical applications, consists most often of a silver nitrate solution. This procedure should be undertaken only by those who have had experience in intraurethral diagnosis and treatment of this nature.

The effect of vaccines in treating chronic gonorrheal urethritis varies widely in the hands of different observers. The vaccines on the market today are more efficient than formerly and the best methods of administration are clearly indicated by the manufacturers of a specific product. Nevertheless, it would seem unwise to suggest that all local treatment be discarded and to rely wholly upon vaccines. They may be employed in conjunction with the other methods generally accepted as indicated in treating chronic gonorrhea.

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THE PROBLEM OF THE PREGNANT SYPHILITIC WOMAN

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At last, through the courage of our present Surgeon-General, it seems that the problem of venereal disease control in the United States will attain the importance that certain other countries have already accorded it. The success of this campaign will depend upon the amount of intelligent cooperation given to it by the medical profession and upon the type of legal plan adopted, as a standard between states, for its enforcement.

Several years ago it was my fortune to observe at close range the manner in which Germany was progressing toward the solution of a similar problem. Their scheme is built upon six major activities:

(1) Thorough training of medical students.

(2) Easily obtainable post-graduate study for physicians.

(3) Adequate training of nurses.

(4) Dissemination of knowledge to the laity.

(5) Legal enforcement by a centralized police power.

(6) Closely supervised and legalized prostitution. The value of such a plan is seen in their falling venereal disease incidence.

In the whole field of syphilis control, no single activity holds such promise of general service as does that of a constant alertness for the recognition of syphilis in the pregnant woman, because (1) by the early recognition and continuous treatment of such disease in the gravid patient, we can practically eradicate congenital syphilis; (2) by a close follow-up of the children born of these mothers, the infected infants can be recognized early, treatment instituted, and a high percentage of cures can be obtained; (3) by the continued treatment of the mother to adequacy, we can largely safeguard her from complications which might later render her unable to care for her family; (4) by the investigation of all members of the family, we have the means of bringing to light large numbers of heretofore unrevealed or inadequately treated infections; and (5) by such attentions to mothers, infants, and families, we can prevent great numbers from becoming wards of later public support.

It has been stated that 30 per cent of the males and 60 per cent of the females, found in latent syphilis, are unable to give clear histories of their infection; thus the necessity of the routine Wassermannization of all pregnant women becomes more apparent. No other single procedure will bring to light a greater number of these gravid patients who are so infected, but it is well to remember that this will not reveal the seronegative woman who still is capable of transmitting to her offspring; thus, with lues foremost in mind, a careful history should be taken and a physical examination should be performed in the hope of revealing the seronegative patient.

Unfortunately, the erroneous opinion still exists that pregnancy in itself can cause a falsely positive Wassermann. Studies have established beyond all doubt that a frankly positive blood, verified on repetition, can only mean syphilis in that individual. However, from time to time, we are called upon to evaluate a serology showing a questionable or weakly positive result in the Wassermann, the Kahn, the Kline, or in all. These can only be evaluated in conjunction with the physical and historical findings. These women, as well as the seronegative female in whom lues is strongly suspicioned, must be periodically rechecked until the true status is established.

In the past, histories of miscarriage and stillbirths were regarded as highly suspicious evidences of lues. However, in the light of modern research, it has been proposed that these interruptions which occur in the first half of pregnancy are probably not due to syphilis. Proponents of this idea point to the evidence that, in the foeti born of luetic mothers in this early period, they are unable to reveal pathological findings of syphilis, while in those delivered in the second half of such pregnancies, they can demonstrate a rather high percentage of positive findings. As an explanation of this, it has been proposed that the cylindrical layer of Langhan cells which exist early beneath the surface of the placenta and which begins to atrophy at this midperiod, acts as a barrier to the passage of spirochetes into the child's circulation.

When an infected woman is found, it becomes the doctor's duty to inform her of her condition and the outlook, to outline tentatively and institute her treatment, to caution her of her responsibility to this and future offspring, and to bring all other suspicioned members of the family to examination. If one believes her disease acquired, he must bring the husband and children to anamnestic, physical and serological examination; if her disease is regarded as congenital, it requires the seeing of her father, mother, brothers, and sisters. In either event, those infected should be advised regarding treatment and the non-infected continued for serological and physical observation over an adequate period.

Recognition of these cases during prenatal care provides the opportune time for advising the patient regarding her immediate requirements and future conduct. At this point it might be well to mention that the establishment of a diagnosis of syphilis in a pregnant woman is never, in itself, sufficient reason for advising a therapeutic abortion or a sterilization, because, by the early and proper continuous treatment of the mother during pregnancy, congenital syphilis is largely preventable and, with the careful periodic observation of the child following delivery, the infected infant can be recognized early and will be quite amenable to cure. However, the habitually pregnant luetic

woman, who is lax in reporting for the treatment or observation of herself and her offspring, is probably logically a candidate for sterilization. As a matter of fact, multiple and properly controlled pregnancies appear to have a beneficial effect upon the syphilis of the mother. Syphilologists base this belief on the observations (1) that the multiparous luetic woman is less liable to show complications than the male, or the female who has never been pregnant, and (2) that the early lesions in the female, who contracts her disease during the gravid state, are usually milder when present or may be delayed in appearing until the pregnancy has terminated.

Our problem differs somewhat on the basis of whether these women possess a congenital, early active acquired, latent, or late syphilitic involvement. With the status of the mother's infection established, we can proceed more intelligently with her treatment and prognosticate more accurately upon the outlook for her infant.

The congenital luetic woman gives from the beginning a different outlook than does the woman in any stage of acquired disease. It is now quite generally believed that the congenital syphilitic never transmits her disease to her offspring, but, as an added assurance to the child, treatment is given. If this mother has not been previously treated fully or if she shows any signs of activity of her disease, in order to safeguard her from tardive developments, her treatment is continued to adequacy.

Though the aim of the antiluetic treatment in the pregnant syphilitic woman is ordinarily directed towards the prevention of such disease in her child, we are forced to digress from this primary consideration in the gravid female who shows active early signs of luetic disease. Regardless of the stage of her pregnancy, continuous alternating arsphenamine-bismuth therapy must be instituted and carried for the succeeding two years. The opinion prevails among some workers that the arsenicals may produce early abortion. However, this view probably lacks definite proof and, even if it were true, the benefit to be derived from the drug far outweighs the danger of an occasional premature birth. In any event, this patient should be advised to exercise rigid methods to prevent conception during the succeeding five years, and if she is unmarried she should be told not to contemplate marriage until she has first followed a two-year period of regular continuous alternating therapy and an additional three-year observation period, in which she has maintained freedom from signs in the blood, spinal fluid and physical examinations. Since these patients are highly infectious, strict isolation is necessary, and if the marital partner is not infected, they must be made fully aware of the situation and the means advised by which they can avoid contamination. In no event should a non-infected partner be treated solely because of the infection in the mate, nor should any therapy aimed at prophylaxis be used. It has been our policy, with all children born of mothers who were in an infectious stage during their pregnancy, to institute continuous alternating therapy immediately following delivery and carry it on for the first two years of life.

It is an accepted observation that the longer syphilis has existed in the mother, the less likelihood there is of transference to the infant. Thus we see that the woman in latent or late syphilis presents a different prognosis for her baby than does the woman who is in early disease. However, the chance for a viable, healthy child is markedly bettered providing treatment is given during the pregnancy and is still further increased if some therapy has preceded the conception. The treatment in these women is to be of the standard continuous alternating type, unless signs of heart, liver, renal, or arteriosclerotic disease, or drug intolerances exist to require a variation. Here, likewise, if the patient has not had sufficient treatment in the past or if special complications require attention, the treatment is continued to adequacy following the delivery.

Irrespective of the type or stage of syphilis found in these women, a few general rules are applicable to all cases:

(1) Other members of the family or contacts are to be investigated as indicated by the findings in the patient.

(2) They are to resume treatment at the first knowledge of each pregnancy and regardless of the amount of treatment in the past.

(3) All children born to them must have periodic examinations beginning immediately postnatal and continued, if not proven infected, during the first two years of life.

(4) All such women are to have periodic observation throughout life.

Almost five years ago, on the invitation of the late Dr. A. M. Mendenhall, it was my good fortune to be asked to conduct a special clinic at the William Coleman Hospital for the care of their pregnant syphilitics, and this has been further developed under the patronage of Dr. H. F. Beckman. During this period, more than one hundred cases have passed through this clinic and this association has afforded an appreciable study of the mothers and infants. The prenatal treatment which we follow, unless findings require a digression, is as follows:

(1) First to tenth week, inclusive: two grains of bismuth salicylate in oil intramuscularly at weekly intervals.

(2) Eleventh to twentieth week, inclusive: 0.3 to 0.45 grams (usually 0.45 gm.) neoarsphenamine intravenously at weekly intervals.

(3) Twenty-first to thirtieth week, inclusive: repetition of the above bismuth series.

(4) Thirty-first to fortieth week, inclusive: repetition of the above neoarsphenamine series. This schedule permits the last two months to be

treatment with arsphenamine which is believed to enhance the child's chance, and, by introducing all the heavy metal prior to the end of the seventh month, we seek to avoid the danger of irritating the kidneys, which are then carrying the heaviest load in the whole pregnancy period. Since the maximum spirocheticidal effect is being sought for the baby, it goes without saying that the chief reliance is to be placed in the arsenicals, and that our chance for a normal, viable child rises in direct ratio to the time allowed for the giving of a greater total arsphenamine quantity during the pregnancy. This is further enhanced if, in addition, a heavy metal series, preferably bismuth, is permitted. To secure the optimal effect, it is apparent that the dose size is not to be decreased except in the face of impending danger signs indicated in the sclera, urine, blood pressure, hepatic or renal damage, or cutaneous reactions; the time interval of a week between injections is not to be lengthened; and mild treatment reactions are not to be over-evaluated because, by sacrificing treatment in the mother, we may sacrifice result in the child.

While the mother is in bed following the delivery, the opportune time is presented to do a lumbar puncture, providing no previous evidence of its negativity exists.

The infants born of these mothers present a variety of problems. They should neither be placed on routine treatment because the mother is diseased, nor should short prophylactic series of treatment be practiced upon them. If the mother has been in early syphilis just prior to or during the pregnancy, the child is routinely started on treatment immediately after birth, and held from the breast. In all other infants, treatment is withheld until absolute diagnosis is established. If the infant is infected, a careful watch of the child will, usually within the first few months of life, reveal the presence of the disease, though these searches in the unproved must be continued up to the second year. A statement and discussion of the points to be evaluated in their check-up follows:

(1) *Blood serologies.* A positivity either of cord or venous Wassermann, drawn in the first two weeks of life, suggests merely that the infant must be watched closely, but is not a positive evidence of infection. On the other hand negativity of either of these does not prove the absence of the disease in the child under suspicion. It has been our opportunity to watch several infants who showed positive cord or early Wassermanns, who shortly and without treatment gave negative results. These we chose to designate as showing a syphilo-toxemia that is a transfer of a positive blood reaction from the mother without the actual transfer of the disease. Serologies in the suspicioned child must be repeated every week or so in the first half year and then every few months up to the second year of life.

(2) *Cord dark-field.* A finding of spirochetes in the scraping from the umbilical vein intima is a definite evidence of lues and treatment of that child should be instituted.

(3) *Placental study.* A histological diagnosis of syphilis in this structure is difficult. Changes suggesting lues are not to be regarded as a definite evidence, but are to be evaluated with other findings.

(4) *X-ray of long bones.* Reports show a high incidence of syphilitic bone findings, such as osteochondritis, saw-tooth metaphysis, osteomyelitis, and periostitis in the infants that are infected. Evidences of such findings usually are present at birth, in the first few weeks, or in the period up to the fifth month. Their presence has been generally regarded as a positive evidence of infection and as satisfactory grounds for beginning treatment. However, in a study reported with Dr. F. W. Cregor, three infants showed osteochondritic findings early, which apparently healed without treatment and without the development of any collateral evidences of lues.

(5) *Physical check-up.* These are to be performed every week or so in the first few months and continued periodically up to the second year. Early findings of papular, squamous, annulopapular and bullous eruptions, snuffles, keystone face, hydrocephalus, and Parrot's pseudoparalysis are points definitely indicating or suggesting infections in the infant. The symptom of undue irritability, on moving the child, should suggest an x-ray of long bones. The occurrence of pneumonia or convulsions in these infants is at least suggestive. The importance once attached to enlargment of the spleen is now questioned.

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ABSTRACT

TREATMENT OF SYPHILIS

William M. Sheppe, M.D., Wheeling, West Virginia (*West Virginia Medical Journal*, February, 1937, page 61) summarizes his opinions as follows:

1. Do not procrastinate; make a clean-cut decision that a given skin or penile lesion is or is not syphilis, employing in this decision clinical acumen, dark-field and blood Wassermann examinations.
2. Begin treatment at once with arsenicals, following a systematic plan for each case.
3. Treat continuously without rest periods.
4. Alternate arsenicals with heavy metals.
5. Use every precaution to minimize untoward reactions.
6. Acquire dexterity in intravenous injections.
7. Explain at the beginning of treatment the expected duration of treatment period.
8. Do not be influenced by stories of "being cured with six shots."
9. Insist on yearly check-up examinations for at least five years, including blood and spinal fluid studies.
10. As a simple guide to treatment keep in mind the 30-0-60-5 plan.

SYPHILIS IN INFANTS AND CHILDREN

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The purpose of this paper is to review our information on syphilis and more especially to discuss the peculiarities of the disease as manifested in the early months and years of life.

This disease is caused by the Treponema pallidum, the same organism which produces syphilis in the adult. For many years there has been clinical evidence in adults to justify the suspicion that there are several strains of the organism, characteristically localizing in certain tissues, as, for example, a strain which produces syphilis of the nervous system. In children no evidence of such a tropism has been found. The physical characteristics of this organism and the methods of identification of it are well established and need not be discussed here.

TYPES

Two types of syphilis occur in infants and children, namely, congenital or inherited, and acquired. The latter form is uncommon in infants and young children so that the major portion of this discussion will deal with the congenital or inherited type.

Congenital syphilis is acquired before birth from the blood stream of the mother by way of the placenta, and consequently no primary lesion exists on the infant. Except for this difference, the disease is divisible into the same stages as the acquired form. Early or infantile syphilis is associated with relatively high mortality, in contrast with the almost complete absence of death in the secondary stage of acquired syphilis, probably explained by the differences in the maturity of the host and the differences in the tissue response to the infection. The early stage of infantile syphilis presents frequent examples of skin and bone lesions more severe than in secondary acquired syphilis of later life as exemplified by the deep skin inflammations leaving permanent radiating scars and by the destructive lesions of oesteochondritis, causing pseudoparalysis. The almost constant rhinitis of infantile syphilis, as well as keratitis of an unilateral type, are especially common in the secondary stage of the congenital type. The keratitis found in the tertiary or late period of congenital syphilis is usually bilateral and is the most frequent of all the lesions which may occur at this stage. Cardiovascular disease is rare among children in either the congenital or acquired type.

Congenital syphilis as it occurs in early infancy corresponds to the secondary stage of acquired syphilis and is designated as *early* or *infantile syphilis.* Babies born with congenital syphilis rarely show any clinical evidence at birth, but if lesions are present at birth, the infection is usually severe and the prognosis is poor. At two months of age, approximately two-thirds will have developed clinical evidence of syphilis, and at six months practically all the remainder will have done so. Mortality during the first six months is high. After this time it is relatively negligible.

The possible variation in the clinical manifestations are many. A syphilitic baby may appear perfectly healthy, his infection being clinically latent, but some relatively common variation from the normal, as unexplained failure to gain or the presence of a moderate rhinitis, may arouse suspicion of the infection. These variants progress to the most severe infections, with extensive skin lesions, severe rhinitis, marked malnutrition or with a pseudoparalysis from osteochondritis. Others may have convulsions as a result of neurosyphilis.

Syphilis acquired after birth and in the period of childhood is relatively uncommon, although acquired syphilis does occur even in very young infants. Passage through an infected birth canal is a possible means of transmission, but is rare. An infant may develop a chancre of the lip by nursing at a breast which is the site of secondary lesions, but this does not often occur, especially if breast feeding is discontinued after the eruption appears. Kissing is a potential means of infection at any age when active lesions exist about the mouth. The promiscuous use of eating and drinking utensils for serving a number of individuals in rapid succession has been a means of infection. Infection may take place also by transfusion from a syphilitic donor.

Often the question arises as to whether or not a syphilitic infection is congenital or has been acquired. If a primary sore is present, or if an early secondary eruption appears after the first six months of life, the decision is usually easy. However, the infected child often comes under care in the late secondary stage when the chancre, if there has been one, has healed. If the child is more than two or three years old, under these circumstances, the presumption is in favor of acquired infection, although it is entirely possible that the late secondaries consequent upon an inherited infection may occur up to five or six years or possibly even later.

SYMPTOMS OF EARLY SYPHILIS

Skin Lesions

Skin lesions are more abundant on the head and extremities than on the trunk. The eruption is first macular and light red, later papular with a ham, bronze or tarnished copper color. If severe, these lesions may desquamate, frequently causing shallow, crusted ulcers. Untreated, the eruption runs its course in one to three months and heals spontaneously. Treatment causes prompt disappearance. Diffuse inflammation of the palms and soles is a most frequent skin manifestation of the infection. The skin is thickened, shiny and red. Desquamation leaves a glistening red surface. The diffuse, deep inflammations about the face, mouth, buttocks and pudenda imply a more severe infection. If the patient is untreated, the fissured

lesions ultimately heal with the formation of permanent scars known as rhagades. Syphilitic pemphigus and paronychia are comparatively rare.

The *condyloma* are the most common of the late secondary skin lesions. These are round, elevated, papillomatous, moist masses of hypertrophied skin, occurring chiefly about the anus or vulva.

Mucous Membranes

The *mucous membranes* of the mouth and respiratory tract are practically the only ones affected clinically in early syphilis. Of these lesions *rhinitis* is the earliest and most constant. It usually appears in from three to six weeks and is present in about 70% of the cases. The symptoms vary from a moderate catarrhal discharge to a profuse, blood-stained mucopurulent one, excoriating the upper lip.

A *saddle nose* deformity may occur from a prolonged syphilitic rhinitis, as from any other prolonged rhinitis, and is due not to destruction of bone and cartilage but probably to arrest of growth.

Mucous patches are smooth, rounded, slightly elevated plaques with a grayish appearance and occur most commonly on the mucous membranes of the cheek, lips and tongue, either as an early or late secondary manifestation. They are relatively uncommon in congenital syphilis. When found in the pharynx or on the tonsils they are usually a part of recurrent secondary syphilis.

Bone Lesions

Bone lesions are common, often symptomless, always multiple, and widely distributed throughout the skeleton, the exact extent and severity frequently being determined only by x-ray examination.

Epiphysitis is found in about 80% of syphilitic babies, being rare after five years. When symptoms are present, pain is present on motion, and because of this, the part is not moved voluntarily and is commonly referred to as a pseudoparalysis. This condition must be differentiated clinically from scurvy which rarely occurs before the seventh month and most often first affects the legs, which is in striking contrast to epiphysitis which involves the arms in nine out of ten cases. Recovery is spontaneous in the course of a few months and rapid with treatment.

Oesteoperiostitis of the skull and *dactylitis* are relatively infrequent.

Lymph glands and *spleen* when enlarged constitute only indirect and presumptive evidence of syphilitic infection and are not very helpful in making a diagnosis, as the former, especially, occurs with other generalized infections. A *moderate secondary anemia* and *malnutrition* are frequent but not diagnostic. *Fever*, which is rarely above 102 degrees, occurs often in the active phase of early syphilis and disappears readily with treatment.

SYMPTOMS OF LATE SYPHILIS

Manifestations of late syphilis, or that stage of congenital syphilis corresponding to the tertiary period of acquired syphilis, are few. Eye involvement is more frequent than all the other manifestations of late syphilis combined. Sixty per cent occurs in children over five years. The chief symptoms of *keratitis* are pain, photophobia, lacrimation, and impaired vision. The cornea is found to have a grayish, steamy opacity and the ciliary vessels about the edges are injected. Both eyes are usually involved, but not always at the same time. The course is chronic, slow in reaching its maximum extent, and even slower to improve. If intelligent treatment is not too long delayed, vision is usually not permanently or seriously impaired. *Choroiditis* should be considered a manifestation of late syphilis, although occurring occasionally in infancy, and is probably always associated with a retinitis.

Bone Syphilis

The bones are affected in aproximately 15% of children with clinical evidence of active syphilis. The changes are found in every age from infancy to thirteen years, after which they become uncommon. They are found more frequently in the white than in the Negro child, the reverse to the situation among adults. The skull and any of the long bones may be involved, but the tibia, either alone or in combination with other bone syphilis, is involved in 90% of the cases. The tibial involvement is most frequently solitary and unilateral.

Osteoperiostitis results in bone thickening on the anterior surface of the tibia, sometimes sufficient to produce a marked outward curving, commonly referred to as *saber shin*. The older the child, the more marked is the new bone formation. Pain is a prominent symptom, which increases in severity by use and is frequently worse at night. Treatment relieves the pain promptly even before improvement can be noted by x-ray.

Gummata occur in approximately 6% of children with manifest syphilis, being most frequent from the ninth to the thirteenth year. Three-fourths of the lesions are found about the nose and throat and the majority of the remainder in lymph nodes and in the skin of the face and legs. They begin as a swelling and when the central necrosis reaches the surface, the mucous membrane or the skin ulcerate extensively and the discharge becomes foul. In such structure as the palate or nasal septum, repair is often incomplete and perforation remains. Bone gummata are destructive lesions and a so-called pathological fracture frequently occurs at these sites.

Arthritis is found in about 15% of syphilitic children past infancy who have clinically active syphilis. The elbow, wrist, ankle and finger joint may be affected, but the knee is involved most often. The most frequently occurring manifestation is a simple effusion and is bilateral in more than 75% of the cases.

Deafness is found in about 3% of children with manifest syphilis, and in about 1.5% when chil-

dren with latent infections are included. It occurs most often in girls and is always bilateral. The onset is abrupt and progresses rapidly to complete deafness within a few months. Adequate treatment may arrest the course, but complete recovery never occurs. There is evidence to support the opinion that deafness occurs not by involvement of the eighth nerve, but by primary changes in the temporal bone and secondary effect in both the middle and inner ear.

SYPHILIS OF THE NERVOUS SYSTEM

Spirochetes localize in the nervous system with the first general dissemination. In these potential cases of neurosyphilis, the spinal fluid shows characteristic findings early in the infection. The cells and proteins are increased and the Wassermann reaction of the cerebrospinal fluid is positive after the third or fourth month. Using the Wassermann reaction as a criterion, approximately 40% of all white syphilitic children under two years of age have neurosyphilis, in 80% of which the infection is asymptomatic. Over two years, approximately, 33% of all white syphilitic children have neurosyphilis. Neurosyphilis is present approximately half as frequently in the Negro as in the white child. Among white infants, the mortality is nearly twice as great in the neurosyphilitic group as in the general group. The Negro seems to be definitely resistant to neurosyphilis, spontaneous cures frequently occurring.

Meningitis is present clinically in about 35% of cases with symptomatic neurosyphilis. Clinical meningitis has its onset at from one to fourteen months of age, with most of the cases beginning at four or five months. The signs and symptoms are those commonly associated with meningitis from other causes, except that fever is slight or absent and the patient does not appear seriously ill. The cerebrospinal fluid is increased both in amount and pressure. The cells are increased to usually less than five hundred per centimeter. The Wassermann reaction is positive. The cerebrospinal fluid findings are strikingly similar to those in tuberculous meningitis. Early treatment relieves the meningeal symptoms promptly.

Hydrocephalus is present in one-third of the infants with clinical neurosyphilis. In the majority of cases, it is the only nervous system lesion, but it may be associated with clinical signs of meningitis which probably explains the convulsions which occasionally occur in an hydrocephalic infant. Syphilitic hydrocephalus is never extreme and usually appears between the fourth and ninth months of age. The prognosis is good and with adequate treatment, the cerebrospinal fluid becomes normal.

Convulsions when occurring as the only sign of neurosyphilis, are not limited to the period of infancy, although 90% occur under three and one-half years of age. After this age, other evidence of clinical syphilis is usually found. During intervals between attacks, the patient appears perfectly well. Spinal fluid findings are the same as in neurosyphilis. It is important to recall that antisyphilitic treatment is not enough to stop the convulsions, but sedatives must be used in conjunction with it. Mental deterioration may occur in spite of intensive therapy.

Epilepsy is a common result of neurosyphilis with convulsions, but this does not mean that syphilis frequently causes epilepsy. Approximately 10% of all children with neurosyphilis have recurrent convulsions. *Mental deterioration,* to some degree, is almost constant and when once established, is rarely improved by treatment. *Facial nerve paralysis* is the most common of the cranial nerve paralyses and occurs most frequently in association with hemiplegia and quadriplegia. *Optic nerve* involvement is found in about 25% of all children with clinical neurosyphilis and rarely occurs before the second year. Treatment does not improve optic atrophy, but may prevent progression of the neurosyphilis of which it is a part. *Mental deficiency* and *mental deterioration* both may occur as a result of neurosyphilis. Mental deficiency and a positive Wassermann does not prove an interrelationship.

Paresis in childhood occurs as a result of neurosyphilis and is characterized by progressive mental deterioration with gradual disorientation, poor memory, fears, behavior changes, delinquencies, emotional instability, delusions and hallucinations. Somatic changes are a positive Romberg, Argyll Robertson pupils, tremors, ataxia, and speech defects. Fortunately paresis is relatively rare in childhood.

STIGMATA

Residual effects and scars of former syphilitic lesions are referred to as stigmata. Few of the stigmata are pathognomonic of syphilis but often their presence gives the clue that leads to the proper diagnosis. Stigmata occur in about one-tenth of young children and about one-half of the older. The most frequent ones are optic atrophy, scars of a former keratitis, rhagades, saddle nose and certain dental hypoplasias. From the point of frequency, dental hypoplasias are the most important. Hypoplasias result from disturbances of the nutrition of the teeth while they are in the process of formation. The defects are permanent, though not apparent until the teeth have erupted. The damage resulting from syphilis is done in the first six weeks of life. The teeth which are affected are those having their morsal surfaces formed at this time and it is for this reason that syphilitic hypoplasias occur almost exclusively in the permanent incisors and the first permanent molars. Conditions other than syphilis, especially rickets, produce nutritional hypoplasias of the teeth and, as a consequence, changes produced by syphilis are not specific for this infection, but syphilis is the only condition which produces this type of disturbance in early infancy. The incisor teeth are the site of the most characteristic changes and the upper central incisors are the most frequently affected. The tooth is peg-shaped

and centrally notched, and, when first erupted, the enamel defect is present, but dentin fills the notch; the dentin later disappears, leaving the characteristic deformity. Deformities of the first permanent molars occur more frequently than those of the incisor, but Hutchinson, who first described the hypoplastic deformity as a result of syphilitic infection, emphasized the defect in the upper central incisors.

DIAGNOSIS

The diagnosis of syphilis may be made on the basis of clinical observation or laboratory procedure. It should not depend on the results of examination of the parents. A certain proportion of the fathers and a few of the mothers of syphilitic children have negative Wassermann reactions. Mothers known to be syphilitic do not always transmit the disease. Few of the clinical manifestations are pathognomonic.

Non-syphlitic rhinitis is far more frequent than the syphilitic type. Spleens are palpable or enlarged in diseases other than syphilis. The skin lesions of ammonia dermatitis, pustular scabies on the palms and soles, may confuse the inexperienced. Keratitis may be caused by tuberculosis and some focal infections. Primary optic atrophy is not always syphilitic. Of all the clinical manifestations, rhagades and typical Hutchinson's teeth are considered most nearly pathognomonic. Regardless of how unmistakable the clinical evidence may be, the diagnosis should be clinched by resorting to laboratory procedures. The finding of the Treponema pallidum makes the diagnosis absolute, but serum is obtained only from superficial early lesions. Tests with the blood serum have few limitations. The Kahn test is perhaps the most widely used, but it is preferable to use the Wassermann also, as occasionally one finds a negative Kahn reaction with serum from young syphilitic babies who have a positive Wassermann reaction. The only noteworthy exception to the reliability of the Wassermann reaction is in the first two or three months of life. Occasionally at birth the reaction is moderately or weakly positive; in all of these, it is strongly positive by the end of the second month. From large series of reactions, absolute negative reactions have been found in only 0.3% of syphilitic children from two months to fifteen years of age. With extremely rare exception, a negative Wassermann reaction in childhood signifies the absence of syphilis, and probably a strong positive reaction shows the presence of syphilis even in the absence of clinical manifestations.

TREATMENT

Prophylaxis

Since it is agreed that the unborn infant acquires its syphilitic infection by transmission of the Treponema pallidum from the maternal circulation through the placenta, and since it is further agreed that intelligent treatment of the pregnant syphilitic woman will result in the birth of a non-syphilitic infant in almost all instances, congenital syphilis should be considered a preventable disease.

The adoption, by all physicians practicing obstetrics, of a routine which would include suitable methods for the determination of the presence or absence of syphilis in the prospective mother, and when present, the administration of intelligent treatment throughout the period of pregnancy, would do much to solve the problem of congenital syphilis.

Active Treatment

Through the years, the treatment of syphilis has become more effective by refinements in the use of the older drugs, together with the newer remedies. Those that have been proved to be of most value are mercury and its salts, iodide, bismuth and its salts, and some of the synthetic arsenical spirillicides.

Mercury: The choice of preparation or route of administration is of little importance, provided adequate amounts are absorbed and no toxic symptoms are produced.

Of the preparations given by mouth, hydrargyrum cum creta is the most desirable for children. For infants, 1/5 grain twice daily; for young children, 1/2 grain three times daily; for older children, 1 grain three times daily. It has been estimated that absorption is the same with 3 grains of gray powder as with 60 grains of blue ointment by inunction. Mercury and its soluble salts are suspended in oil for intramuscular injections. Mercuric chloride in a 1% solution may be used intramuscularly in the dose of one-half minim per kilogram of body weight once or twice weekly.

Iodides are not spirocheticidal and have no place in treatment of early syphilis. They have no effect on the Wassermann reactions.

Bismuth in some form has found, in recent years, a secure place in the treatment of syphilis. It is superior to mercury as a spirillicide and less toxic. It is given intramuscularly. Many preparations are available and dosage depends upon the one used.

Arsphenamine is the most effective of the arsenical preparations, but preparations, and the necessity of intravenous administration, have led many to choose other forms of arsenic.

Neoarsphenamine, though less difficult to prepare for administration, should probably also be administered intravenously; thus it is not the choice of many in the treatment of infants and young children.

Sulpharsphenamine is popular in the treatment of syphilis in infants and young children as it may be given, and is effective, when given intramuscularly. It may more readily produce a dermatitis than the above mentioned arsenical compounds. For intramuscular use, 1 Gm. is dissolved in 3 cc. of water. The dose is 20 mg. per kilogram of body weight.

Tryparsamide has been used chiefly in the treatment of neurosyphilis. Its use in infants is unnecessary because early neurosyphilis responds well to the more commonly used drugs.

Acetarsone (Stovarsol) is a white powder dispensed either in powder or tablet form and is quite effective when given by mouth. It may be given in the following dosage: 5 mg. per kilogram, daily for the first week; 10 mg. daily for the second week; 15 mg. daily for the third week and 20 mg. daily for the next six weeks. After a six-week interval, another course is given. At least three courses are given. Reactions are usually slight and disappear with temporary discontinuance of the drug, although they are not entirely without danger, as a few deaths have been reported.

Malaria treatment may be employed in those cases in which the neurosyphilis has not responded to the more ordinary methods. The results are more satisfactory in patients with asymptomatic than those with clinical neurosyphilis, and in acquired rather than congenital syphilis. Even though the results in inherited syphilis are discouraging, this method of treatment is warranted if other methods have failed.

Regardless of the system of treatment chosen, certain basic principles are prominent in any good treatment scheme:

1. Continuous use of one of the heavy metals beneficial in syphilis.
2. True rest period should not be permitted.
3. The arsenical drugs may be given in courses, but during the rest periods, either bismuth or mercury should be administered.

By employing continuous treatment, a cure is more easily effected, and, so far as congenital syphilis is concerned, relapses do not occur. If a choice lies between mercury and bismuth, bismuth should be used.

Regardless of what system of treatment is employed, it is important that the beginning be gradual, using only a fraction of the full therapeutic dose. This is especially true in cases of florid infantile syphilis. Many believe it desirable, especially in infancy, to begin treatment with bismuth or mercury medications, and follow with some arsenical preparation. The physical condition of children under treatment should be followed closely. The urine should be examined frequently. Wassermann tests should be made at intervals and after the test reaction is negative; continued treatment is desirable for at least six months in infants and one year in older children.

SUMMARY

A general discussion of the subject of syphilis in infancy and childhood is presented, special attention being directed to the congenital type. It is suggested that congenital syphilis be considered a preventable disease and that the problem be approached from this viewpoint. The routine adoption of suitable methods for determination of the presence or absence of syphilis in the pregnant woman and intelligent treatment throughout the period of pregnancy would be of greatest value in eliminating syphilis of the congenital type.

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HISTORY OF SYPHILIS CONTROL

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Medical historians are divided into two camps regarding the origin of syphilis. The one group (Pre-Columbianists) points to certain ancient and early medieval descriptions of disease entities and to certain pathological findings in the remains of early peoples as definite evidences for substantiating its claim that syphilis existed in Europe prior to the late years of the fifteenth century. The other group (Columbianists) attempt to show that it was a new disease which arose to plague European civilization following the return of Columbus and his men from their first voyage to Haiti and San Domingo. Both groups have and will probably always find adherents but will likely never reach a complete agreement in their opposing opinions. However, both sides have contributed rather interesting facts and conjectures regarding this disease.

If syphilis existed among the earlier European peoples, it was not definitely differentiated but lay enmeshed in other vague dermatological diagnoses of that period. During the first and second centuries, Celsus differentiated between hard and soft lesions of the genitalia, Antyllus proposed a surgical treatment for the aneurysms so prevalent among the Romans, and Aretaeus wrote of a destructive process of the nose and pharynx suggestive of syphilis. In the thirteenth century, Saliceto (1269) spoke of a disease contracted by coitus with infected women. As early as the twelfth century, physicians used mercury inunctions in the treatment of a vague group of dermal disorders classed as psoriasis, leprosy, eczema, etc. Because the descriptions of some of these cases bear a similarity to our modern findings in syphilis, and because a number of these cases were said to have cleared under mercurial therapy, Karl Sudhoff, of the Institute of Medical History in Leipzig, suggested that probably some of these patients were suffering from syphilis. However, Virchow opposed the view that certain osseous changes found in the bones of earlier peoples suggested syphilis, but rather believed that these changes were either identical with the arthritis deformans of old cave-bears or were caused by plants or insects. Jonathan Hutchinson theorized that if syphilis had been prevalent in a transmissable form among the early medievalists, Chaucer and Boccaccio would have referred to it in their writings.

In 1510, Diaz de Isla wrote the first document which proposed that syphilis had been introduced in Europe by the sailors who returned with Columbus from his first voyage to America. He further claimed to have treated a number of these so-infected men prior to their landing at Palos. Whether that be fact or fiction, it does remain certain that medical literature became rife with reports of the disease following the siege of Naples by Charles VIII of France in 1495. In that same

year, the Emperor Maximilian wrote of syphilis in his "Edict on Blasphemers" and the following year it was referred to in the writings of Theodoricus Ulsenius, Sebastian Brant, Hans Schauer, Giorgi Sommariva, and Konrad Schellig. It was in the published poem of Theodoricus Ulsenius that the first illustration of a syphilitic patient appeared in the wood-cut of Albrecht Durer. Thus from the sudden numerous descriptions of this disease it would seem that, at that time, it at least reached its first epidemic proportions among Europeans. The French claimed they had not been confronted with it before and thus thought it to be something which had been transmitted to them at Naples; therefore, they referred to it as mal neapolitino. On the other hand, the Neapolitans blamed the French for bringing it to them, and called it mal franzosa. It is related that, during this campaign in Italy, Charles VIII fell victim to the disease and, on his return to France, he suffered a specific alopecia. To cover his patchy loss of hair, it is said that Charles decreed that wigs were to be worn as a part of the court dress.

During the immediate period that followed, laymen likewise occupied themselves in writing on this subject and in proposing and dispensing remedies for its cure. The great Florentine artist, Benvenuto Cellini, gives in his "Autobiography" a detailed description of the symptoms he experienced in his infection and the manner in which he was treated. Much of the treatment of the period was carried out by men, often charlatans, who traveled from town to town, spending variable periods in each. The chief therapy consisted of mercury, which was given by mouth, inunction and fumigation, quassia root infusion, guaiac and diet.

Not until the year 1530 did the term syphilis appear. At that time Girolamo Fracastor published his poem "Syphilis sive Morbus Gallicus." Here in the shepherd boy whom he chose to name Syphilis he describes fully the symptoms of what was then referred to as morbus gallicus.

The two centuries which followed were spent in further descriptions of this disease and in attempts to differentiate venereal diseases. Then, in sincerity, but most unfortunately from the scientific standpoint, the subject of venereal disease classification received a most serious set-back which clouded the whole field for the succeeding fifty years. In the year 1786, John Hunter published his "Treatise on Venereal Disease" in which he staunchly contended that gonorrhea and syphilis were the same disease. Due to his prestige in the medicine of that period, and due to experiments which included self-inoculation, to prove his point, the profession accepted his view and labored under the erroneous opinion that both sprung from a single cause. However, in 1838, Phillipe Ricord, who was born of French parentage in Baltimore, Maryland, and who returned to France to be educated and to practice, published his most meritorious work in venereal disease. In this, once and for all, he separated the two entities of syphilis and gonorrhea.

Although advances were made in the clinical studies in this disease, it is interesting to note that until the twentieth century no advances were made in its treatment; for more than four hundred years the sheet anchor of the physician was mercury. True, there was much controversy as to the method of employment; it had been administered orally, by inunctions, and by inhalation of burning fumes, all of which methods have their advocates and defenders even to the present day. In 1861, Hebra began to treat syphilis by the hypodermic route; this subcutaneous administration was followed by pain, swelling and many abscesses. In 1888, Balzer pointed out that injections should be made intramuscularly. There was no common agreement on what salt of mercury was best to use; the French favored gray oil; the Germans, calomel in oil; the Viennese, salicylate in oil. This last one has probably established itself in the minds of American syphilologists, at least, as the most desirable.

For more than four hundred years, the medical profession had fought a losing fight with syphilis. Osler remarked, "The story of the search for the cause of syphilis is a tale to make the judicious grieve," and Lassar stated, "One hundred and twenty-five causes of syphilis have been established during the past twenty-five years." These statements by such men as Osler and Lassar only prove the tremendous amount of research that was going on. During the closing years of the eighteenth century, suspicion was strongly directed against syphilis as being the cause of such diseases as paresis and locomotor ataxia.

Paralleling the use of mercury for two hundred years was that of the iodides, first used in the way of fumes from burning sponges; early in the eighteenth century, iodine was established.

Temperate life, hygienic environments, tonics, then as now, have always had a prominent place in the art of medicine.

In 1903, Metchnikoff, while searching for something that would successfully immunize against syphilis, succeeded in inoculating a chimpanzee with syphilis. While up to the present time no successful method of immunization has been discovered, these successful inoculations provided better opportunities for observation and study and engendered new hope in the minds of all of those who were interested in the disease.

In March, 1905, Shaudin and Hoffman discovered the triponema pallidum and established it as the causative organism of syphilis. This discovery has made it possible to make the diagnosis of syphilis absolutely positive, and especially so at that stage of the disease when cure can, beyond a doubt, be made. The physician who neglects or denies his patient the opportunity for a cure in this stage of the disease assumes a very great responsibility, for there is a period of a few weeks here in the

course of the disease that the dark-field microscopic examination offers the only chance for a positive diagnosis. Therefore, the demand on the physician of the hour is that he be prepared to meet this obligation.

In 1907, Wassermann made the serological discovery that bears his name. Apropos of this discussion of the modern history of syphilis and the preceding paragraph is the fact that the Wassermann may be expected to begin to be positive about four weeks after the appearance of the lesion and about seven weeks after the infection. The Wassermann of itself is not to be accepted as a positive diagnosis of syphilis. (This point was especially stressed at the Conference on Venereal Control recently held in Washington, D. C.) Since the discovery of the Wassermann in 1907, it has undergone several simplifications and refinements and there were added other serological discoveries in the way of the Kahn, Kline, and Hinton tests which are in many laboratories run concurrently with the Wassermann and are available to the physician for his evaluation. It would seem well to mention here that, for the last two years, there has been a movement set in motion to thoroughly standardize all of these tests.

In 1909, Ehrlich discovered salvarsan and, a little later, neo-salvarsan. The rapid disappearance of syphilitic lesions following the proper administration of these drugs is such as to arouse the enthusiasm and hope of the physician as well as of the patient. It is a fact that the most useful remedy for control and cure of syphilis is to be found in the trivalent arsenicals. It may be useful to know that, following the discovery of salvarsan, in order to prove its worth, doses were sent to reputable physicians throughout the world, without cost, to be used in selected cases. The writer personally knows of an instance when a Viennese professor refused the fee of 25,000 kronen ($5,000) for a single dose, for the reason that the acceptance of such a fee would be a violation of the understanding in which he had received the remedy. Salvarsan, which we first administered intramuscularly, has undergone many refinements since its original discovery; now it is practically always administered intravenously. So far as the writer knows, the first dose of neo-salvarsan to be administered with a 10 cc. syringe (and this is the way it is usually administered now) was at the Indiana University School of Medicine.

Salvarsan and neo-salvarsan belong to the trivalent group; another arsenical, tryparsamide, belonging to the pentavalent group, is now extensively employed in treating neuro-syphilis.

It was late in the eighteenth century that bismuth was first recognized as being a useful remedy in the treatment of syphilis, but it was not until several years later that claims made for it attracted sufficient attention from syphilologists to bring about its wide use, until at the present time, after ten years of intensive employment, it holds a place second only to arsenicals, and in advance of mercury, for the reason that it is a better tolerated drug and more treponemicidal than is mercury. So at the present time we find the drugs employed in the treatment and cure of syphilis are the arsenicals, salvarsan, neo-salvarsan and tryparsamide, bismuth, mercury and the iodides, and the special preparations of these drugs that have proved their worth are to be employed above all others in this movement for syphilis control.

For a number of years the writer has had the feeling that there should come from the American Dermatological Association some annual publicity or propaganda, if you wish to call it that, for syphilitic control. This body, more than any other organization, has been in a position to appreciate the need of it, because its members go to make up the heads of clinics where the disease is treated and direct the teaching of the subject in medical schools. It remained, however, for the movement to have its origin in the League of Nations, and it met a ready response throughout the civilized world.

In this country there was developed what has been known as the Cooperative Group made up of the department heads of teaching centers with their accompanying clinics. The members of this Cooperative Group are all members of the above-mentioned American Dermatological Association. The members of the Group have come from those institutions which have in the past had the best facilities, financial and otherwise, for good teaching and for the compiling of good records. An enormous amount of work has been done in studying those records. The personnel of the Group has been such as to command the confidence of the entire medical profession, as well as all governmental agencies, local, state, and national, and, in fact, all intelligent laymen whose attention has been called to the movement.

Doctor Thomas Parran, Surgeon-General, has acted upon a tentative plan recommended by a committee of which this Group was a part, and the recent Conference on Venereal Disease Control, held in Washington, D. C., unanimously adopted that part of the report of the section on syphilis after every phase of the diagnosis of the treatment and cure of syphilis had been thoroughly discussed in its section meetings. One of these recommendations was that "The Wassermann was not to be accepted as a case-history" (or of itself as sufficient for a diagnosis of syphilis); another was that only those remedies should be used in this effort at syphilis-control which have established themselves, holding aloof from others until they could receive the approval of such a body as the Cooperative Group. Every syphilologist knows this decision to be perfectly sound, notwithstanding the fabulous claims made by commercial institutions for many preparations.

Statistics as to the prevalence of syphilis are very inaccurate, yet every syphilologist realizes that if the public knew how prevalent the disease

is, it would be astounded. Yet it would seem that the curtain that hides this mysterious tragedy which so affects the physical, social and economic life of the nation, threatens to be lifted. Should a means be found to do so, there is no question but that public opinion would support any program that promised its eradication.

From a public health standpoint, the country is primarily interested in the control of early syphilis and the control of syphilis in the pregnant woman, for it is in this early stage of syphilis that it is transmitted. The pregnant woman may transmit the disease to her unborn child. However, governmental agencies and the taxpayer must be interested in the latent syphilitic for economic reasons.

The big question is how this control may be brought about. Shall it be done by a method comparable to that practiced by the government for narcotic control? It does seem to be a question for the police powers of government, rather than for the medical profession which has no police power.

The writer attended the section meeting of the Venereal Disease Control Conference when the problem of control was under discussion and heard the section adopt a motion "that cases of venereal disease should be reported by names." When this section report was brought to the general conference for adoption, the point met objection. After considerable discussion, the compromise motion was adopted providing that "each state, municipality or district should employ such method of reporting as it might see fit" which leaves this question much in the same position as before.

The conference recommended that the government appropriate the sum of twenty-five million dollars for the purpose of venereal disease control. It would seem improbable that the government would appropriate this amount, or any considerable sum unless definite methods are provided for the control of venereal disease.

Doctor Ray Lyman Wilbur, president of Leland Stanford University, former president of the American Medical Association, former Secretary of the Interior, president of the National Social Hygiene Association, stated, February 3, 1937, that "Syphilis could be wiped out in one generation if the medical profession was given the opportunity to apply the knowledge at its command." Will the governmental authorities provide this opportunity?

23 East Ohio Street.

The high lights of this control program will revolve about three main divisions: (1) Educating the public; (2) Finding infectious cases; (3) Proper treatment of syphilitic patients.—From an editorial, *Jour. Michigan St. Med. Soc.*, Feb., 1937, p. 105.

WHY DON'T WE STAMP OUT SYPHILIS?

F. R. N. CARTER, M.D.*
South Bend

Diphtheria, smallpox, yellow fever, typhoid fever, malaria and many other infectious diseases have relaxed their hold upon the lives of mankind and are fast being eliminated as a scourge of humanity. An eminent authority recently said that tuberculosis and leprosy will be eliminated from the face of the earth before a cure is actually known.

Sad is the condition surrounding the disease known as syphilis. The cause of this disease is known, the diagnosis is known, the treatment is known, and finally a measure of the success of treatment is known.

Why, then, is syphilis permitted to go along its path of devastation, in its unbridled fury?

According to Dr. Alfred Potter, of King's County Hospital, *ten million* people in the United States have syphilis. The Metropolitan Life Insurance Company, through its actuarial department, places this number at 6,300,000. Five hundred thousand new cases of syphilis seek treatment each year. Millions of dollars annually are poured out of the pockets of these unfortunate victims for a disease which is absolutely preventable if medical men see to it that the knowledge which they already possess is utilized in the combating of this, the greatest enemy of mankind today.

To bring the problem closer to our own state, Indiana has a population of approximately 3,000,000 people. If we take ten per cent of the population as an estimate of the number of cases of syphilis in our midst, then 300,000 cases should be under constant treatment in our own state. To make this more intimate, in Fort Wayne there should be 12,000 cases; Evansville, 10,500 cases; Indianapolis, 37,200 cases; South Bend, 10,900 cases. A number of surveys show that only one-tenth of the existing cases are under treatment.

Some discussion has been occasioned by the statement that ten per cent of the population is syphilitic. It is very difficult to make an exact estimate of the number of cases of syphilis in existence. The University of Wisconsin has been able to do Wassermann tests on its student body. Two-tenths of one per cent of the blood tests in this study were found to be positive. In 1934, the Dupont Chemical Company, an industry employing more than 36,800 people, with plants in seventeen different states, required all of their new employes and as many of the old employes as would voluntarily submit, to have a Wassermann test. All new employes were examined and less than ten per cent of the old employes refused. In all, 36,794 employes were examined with 1,488 having positive blood tests. This represents four per cent of the employed personnel of this company.

* Chairman, Committee on Syphilis Control, Indiana State Medical Association.

Newark, New Jersey, is one city, and probably the only one which requires all domestic servants to have physical examinations before employment is granted. During 1935, 19,381 servants were examined. In this group, 3,329 or 17.2 per cent were found to have positive blood tests.

The prevalence of syphilis in various industrial groups has been compiled by the American Social Hygiene Association as follows:



It is well known that among the colored people of our southern states, every other person has a positive Wassermann test. Thus, the estimate of ten per cent is not far from right. This may be a little high for your particular community. However, one per cent would be high for any community when dealing with a disease which could be completely eliminated from that community.

There were 9,586 deaths from organic heart trouble in Indiana last year. Twenty per cent of this number was due to syphilis. Had this disease been treated at the time of its inception, this huge total would have been greatly lessened. The public certainly will be interested in knowing that the doctor may prevent this much heart trouble, and will undoubtedly ask why he doesn't. The public may ask the following questions:

Is syphilis responsible for many children being born diseased?

Is it the cause of many abortions, miscarriages and stillbirths?

Is it the cause of blindness?

Is it the cause of paresis or softening of the brain?

Is it the cause of locomotor ataxia?

Is it responsible for more than ten per cent of all insanity?

Is it often the cause of apopletic and paralytic strokes?

Is it responsible for a large proportion of diseases of the heart and blood vessels?

Does it affect the kidneys, stomach, and other vital organs?

Does it decrease earning capacity?

Does it decrease the length of life?

To all of these questions the doctor must have answers.

The state of Illinois had 27,000 insane people incarcerated in its institutions during 1935. These institutions were maintained at a cost of $10,000,000 to the taxpayers.

The state of Indiana has five institutions in which insane people are cared for. The population of these institutions was 7,613 during 1935. The total maintenance cost of these asylums was approximately $1,500,000 for the year. Dr. Max A. Bahr is responsible for the following statement in a recently issued booklet on state hospitals: "About twenty-five per cent of cases in state hospitals are due to syphilis and it costs the taxpayers of Indiana over a half million dollars annually to treat, care for and maintain its syphilitic patients. This amount is appalling when you consider that syphilis is an acquired disease and can be entirely prevented."

What is the answer of the medical profession to the facts enumerated above? The doctor knows the diagnosis, the treatment, and a measure of his treatment. Then why doesn't he lead in the elimination of syphilis as he has led in the elimination of diphtheria, smallpox, and other infectious diseases?

The call has come to our profession. Today is the time when leadership is demanded of medical men. Let them respond to this call; otherwise they will find themselves being led by other organizations who are only too glad to set up their banners in a cause which is purely a challenge to the medical profession.

105 E. Jefferson Blvd.

The Secretaries' Conference, postponed because of flood emergency, will be held at the Columbia Club in Indianapolis Sunday, March 21, 1937.

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MARCH, 1937

EDITORIALS

VENEREAL DISEASE CONTROL

Soon after Dr. Thomas Parran assumed the duties of Surgeon-General of the United States Public Health Service, he outlined a major program which has for its object the banishment of venereal diseases from the United States. Because of the prudery of the American people, such a program would have received no consideration a few years ago, for the "social diseases"—syphilis and gonorrhea—were unmentionables. In his preliminary work, Dr. Parran found that he had no trouble in enlisting the medical profession and the public press as major lieutenants in his army.

Before any national program such as this one can be launched successfully, the interest of the individuals involved must be aroused. There is ample evidence that the American public is interested in the subject of venereal disease control, both from the standpoint of public welfare and of individual happiness. A recent proof of this is contained in *Fortune's* Quarterly Survey,[1] wherein 81.4 per cent of the persons questioned concerning legalized prostitution had definite opinions on the subject and "Interviewers were surprised to find most of the public interested in the question and willing to discuss it frankly." A non-embarrassed interest in the subject of venereal disease control and legalized prostitution is a long step forward, and it is now time for the medical profession to do its part.

Influential newspapers in our larger cities have come to the front and are printing news items and editorials on the subject of venereal disease control. Already the publicity has far exceeded the fondest dreams of those who have worked in this field for many years and who have vainly hoped that some day steps might be taken to arouse our people to a realization of the health hazards and misery resulting from venereal diseases.

At the Secretaries-Editors conference in Chicago last November, Surgeon-General Parran outlined his project and effectively presented his ideas to some three hundred representatives of the American Medical Association. Indiana, well represented at the conference, immediately subscribed to the plan, and it is with much pleasure that we dedicate this number of THE JOURNAL to the venereal disease control campaign.

We have attempted to include in this issue essential information concerning the diagnosis and treatment of venereal diseases. It is, of course, impossible to publish in one issue the material on this subject that we would like to place before the general physician. The articles published herein were prepared by the authors on rather short notice, and it is only through their courteous willingness and cooperation that we are able to present this material to you in the March issue. It is especially regretted that an article concerning the plans of our own Indiana State Board of Health for cooperation in this work could not be obtained, but the tremendous load placed upon that department in flood emergency work (which has been carried out with unbelievable speed and efficiency) has demanded the entire attention of the department's whole personnel. We hope to have an article from that department for publication in a later issue.

At a recent conference on venereal disease control in Washington, D. C., a message from President Roosevelt was presented in which he said, "I am glad to convey to you this expression of my very deep interest in your effort; the Federal Government is very much interested in reducing the disastrous results of venereal diseases." It was believed to be the first time in history that a President of the United States had openly discussed the subject of venereal disease. This conference, with an anticipated attendance of perhaps two hundred, had an enrollment of several times that number, and all exhibited an eagerness to participate in some coordinated plan.

The man directly in charge of the present campaign is Dr. R. A. Vonderlehr. His eight-point program thoroughly covers the field, and it unquestionably will be carried to completion. A Federal appropriation of twenty-five million dollars has been requested and there is every reason to expect that appropriation and additional sums as needed from the present Congress. The Surgeon-General has made it plain that his department will see to it that every victim of venereal disease will have opportunity for competent treatment and, by the same sign, it is apparent that if this treatment is not to be had in the usual channels, the Federal

[1] Quarterly Survey. *Fortune*. Vol. XV, No. 1 (Jan.) 1937, p. 164.

Public Health Department will do something about it. In other words, it is up to the medical profession to get into the game, or else! Surgeon-General Parran means business. The Journal proposes to lend every possible aid to the end that Indiana will be one of the foremost states when the final reckoning is made. Other countries have been successful in controlling venereal diseases, and what they have done, we can do. The medical profession must realize that there is an insistent, inexorable demand on the part of the public that Dr. Parran's program be carried out.

Our first duty is to aid our health departments by immediately reporting all such diseases coming to our attention. A voluntary compliance with this already-in-force health measure will further arouse the public interest; failure to comply with it will bring embarrassment, for this is now a Federal program and Uncle Sam will not be disobeyed. Under the new plan, each state department of health will have a man in charge of the work in that state, and every effort will be made to have reliable and complete reports of all venereal infections. If necessary, the Federal Government will supply proper diagnostic facilities, and special stress is being laid upon the importance of the dark-field examinations in the diagnosis of syphilis. Venereal disease clinics will be thoroughly overhauled and the slipshod manner in which many of the clinics are now conducted will be investigated and remedied.

Thus are we launched upon a project hitherto deemed an impossible one—a project fully manned and now being laid before a public which rapidly is becoming venereal disease conscious. Many things remain to be done, and first among them is the enlistment of every right-thinking physician in Indiana and in America.

The Indiana profession was among the first to endorse the Surgeon-General's program, and it is among the first to issue a special number of its official magazine devoted to the cause. It can and should become one of the first to set the machinery in motion. We are proud of Indiana medicine; we have pioneered as but few states have done; we have met emergencies as they have arisen, in many instances anticipating them and being prepared for them. Now we stand ready to uphold the enviable record which is ours.

A very complete and informative article by John H. Stokes, M.D., entitled "Combatting Early Syphilis," appeared in *The Reader's Digest* for March, 1937, Vol. 30, No. 179, p. 9. It is an educational article for laymen, and copies are obtainable at a cost of $1 per hundred from the Reprint Editor, *Reader's Digest*, Pleasantville, N. Y.

THE OHIO RIVER FLOOD

Pennsylvania, Ohio, Kentucky, Indiana and Illinois—those states traversed in part by that river long famed in song and story as "The Beautiful Ohio"—felt the sting of its fury when that noble stream left its customary boundaries and wreaked unprecedented havoc upon the territory contiguous to its usual route.

For more than forty years we have had a more or less intimate acquaintance with the Ohio, as a student along its shores, as a means of transport on the Elysian honeymoon, and by way of semi-annual trips to its shores; we have seen its gentle beauty and its furious tantrums, but never dreamed that it would become so greedy and unruly as in January of 1937.

The daily press, particularly in the Hoosier state, deserves just tribute for its 100 per cent efficiency in keeping us advised of what was going on in the southern section of Indiana comprising more than one-third of our counties; thirty-five of our ninety-two counties were involved in this greatest of Middle West flood disasters.

The American Red Cross, the greatest agency of its kind in the world, was on its toes from the first, and never negligent in answering appeals for Red Cross funds on such occasions, the American people rose magnificently to the occasion and contributed in terms of millions of dollars. Welfare workers in countless hundreds, trained police and firemen, Coast Guard patrols, State public health officials, American Legion, the military, and every group necessary to combat such a catastrophe was immediately available.

Executive-secretary Tom Hendricks traversed some several hundred miles in the flood area to determine how the State Association might aid physicians in their work of medical relief. Volunteer physicians supplemented the medical work already available, but for the most part the local physicians were efficiently organized and medical relief work was carried out with clock-like precision.

Indiana Medicine, comprising that group which, as occasion has demanded, has met every emergency confronting Hoosier residents, was in the van. Indiana Medicine has many times been confronted with grave situations and always has come from the fray completely victorious, but the work done in this flood emergency has far exceeded its former glories.

Evansville physicians did yeoman service, as did those in New Albany, Jeffersonville, Aurora, Lawrenceburg, Madison, and the other large communities, while those in the smaller towns did heroic work. First-aid stations were located everywhere — in distillery buildings, school buildings, lodge buildings, churches—anywhere that was high and dry. Some of these stations progressed to become infirmaries and emergency hospitals where surgical work was carried out efficiently in spite of great handicaps. In one instance, three patients

with acute appendicitis were brought into the improvised hospital, the surgeon did his work, and the patients have recovered.

Thus it went. Each day presented new problems and each day solutions were speedily presented by those professional men who make up one of the greatest state medical organizations in the country. Not once has there been printed or heard a comment except in praise of Hoosier medicine during this great crisis.

Those physicians who were not in the flood area stood ready to give their services, but most of these were not called. The next best aid, money and supplies, was given generously. Many county societies contributed as a body in addition to personal donations.

It is not for us to suggest what steps should be taken to prevent a repetition of this disaster whose cost in property and human lives probably never will be known, but we have an abiding faith in the engineering branch of our War Department, and it is to them that we must look for some means of flood control that will provide security for Ohio valley residents in time to come.

The work that has been done and the relief work that is being done at present deserves the highest praise; not one word of criticism can be offered. We are more than proud of the part that Indiana medicine has played in this great drama.

FIGHT CANCER WITH KNOWLEDGE

Coincident with the publication of this special number of The Journal, which deals largely with the syphilis problem, there is need to call attention to a drive which will occur this month on the cancer problem. Both campaigns are of importance to the public health program and while each has a different objective, yet each merits the support of every physician.

An evaluation of the drive on cancer is not out of place here. In 1900, Dr. Joseph Colt Bloodgood pointed out the pitiful fact that only a handful of persons were living as long as five years after operations to remove cancer. He, perhaps more than anyone else, spread the gospel of making the public cancer conscious and, in 1913, there was formed the American Society for the Control of Cancer whose object was "to disseminate knowledge concerning symptoms, diagnosis, treatment and prevention of cancer . . ." That organization has pushed ahead under able leadership, always enlisting persons of unselfish motives to help. No defense of that statement need be made when we learn that Dr. James Ewing is the chairman of the board of directors.

The American Society for the Control of Cancer needs more help. With the slogan "Fight Cancer with Knowledge," they will conduct a drive for membership in an organization known as the Women's Field Army. Beginning on March 21 and continuing for one week under the special efforts of the Federated Women's Clubs of America, the Field Army will be recruited. The Field Army's chief activities will be those of publicity, distribution of literature, exhibits, lectures and mass meetings. Each and every one of these activities merits the support of the medical profession.

Those docors who show a willingness to assist in this campaign will be rendering the public a distinct service.

TO FRIGHTEN OR ENLIGHTEN?

In days gone by mother left home for the afternoon with the injunction to the children that they should not put beans in their noses. She gave directions of this sort because it was easy, and because she did not know how to outline an afternoon of interesting work or diversion for the children in order that they might be kept out of mischief. Exactly the same situation exists with regard to venereal diseases. Those who have given the matter very little thought but who realize the havoc that is wrought by venereal disease immediately jump to the conclusion that a law should be passed or that something should be done to prevent this terrible scourge. They are quite right in assuming that something should be done, but they are wrong when they attempt to correct the situation by frightening the population into the paths of righteousness. The present generation of young people does not scare easily, and when you begin to talk about hell-fire and brimstone, this enlightened generation of young people immediately wants to see the fire and smell the brimstone. Undoubtedly there are times when it is necessary to caution inexperienced persons concerning the dangers that may be lying in wait for the unwary, but it is unfortunately more important that they be given thorough and correct instruction and enlightenment concerning the whole process and not merely that they be scared to death in the hope that by such means they will be kept safe from harm.

Venereal disease is the black flower which springs from the underlying mycelium of social, economic, and educational wrongs. It is impossible to cure the situation simply by destroying the outward manifestation. The public needs exact information on all phases of the sex problem. Only after such instruction will they have a proper appreciation of the whole situation and be able really to do the thing that needs so badly to be done. It has long been known that highly sophisticated communities have much less venereal disease than would be generally supposed, whereas ignorant

communities—communities which would be considered relatively free of social diseases—are actually teeming with it for the reason that, being utterly ignorant of these diseases and their causes, they are incapable of applying scientific methods to their recognition or eradication.

The venereal disease campaign which is being launched at the present time involves correct diagnosis and scientific treatment, to be sure. It likewise depends upon instruction in the use of prophylactics, information concerning early symptoms of the diseases which should send the patient to his doctor, the cooperation of medical and health authorities and a great many other activities which are being planned. Even more, however, it needs a well-appointed program whereby young people will be enabled to learn the real truth about themselves and their bodies. In times past we have been utterly irrational in our methods of teaching these subjects to the young people. Properly taught we might reasonably expect them to be better protected not only against venereal disease but a great many other mental and physical dangers which all too often have the effect of causing unhappy marriages and a whole chain of sexual dysfunctions arising from the fact that the public is mostly ignorant concerning these matters.

Here is an opportunity not merely to improve the venereal situation but also to correct a very wide variety of other problems.

TRAFFIC MANNERS

Editor Dempster, of the *Journal of the Michigan State Medical Society*, in the February number strikes at the very heart of the subject of prevention of automobile accidents when he says that "the greatest single factor in the promotion of safety on the streets is courtesy or good manners. If drivers and pedestrians were as courteous on the streets as, let us hope, they are in their own homes, there would be very few casualties in comparison to the number in the past few weeks. It seems that the automobile has brought to the surface all the bad manners of which some persons are capable. Consideration for the other fellow and strict adherence to traffic signals, safety zones and other street signs, on the part of the pedestrian and driver, will accomplish more than any expensive program of survey and street widening that can be devised. Let's use common sense!"

To our notion, the above quotation includes about everything that needs to be said on the subject; it hits at the crux of the matter and if both drivers and pedestrians would hearken unto it, automotive accidents would become materially lessened.

That the disasters are ever on the increase and that this increase will continue so long as the present conditions exist, cannot be denied. Civic and state police seem at their wits' end in their efforts to stem the rising tide of these accidents; city councils and state legislatures find themselves unable to pass laws fast enough to meet the ever-increasing number of such accidents. Our home city but a short time ago enacted what was said to be a model traffic ordinance; a perusal of it seemed to convince the most doubting of Thomases that here, indeed, was the final solution to the traffic problem in a city that held the darkest record of any city of comparable size in the nation.

Today we find the city attorney busily engaged in the drafting of a *real* traffic ordinance; it seems that the former one did not pan out, since we still hold the unenviable record among cities of our class. Most traffic ordinances of the past have been directed toward control of automotive traffic, a United States Supreme Court decision having held that the pedestrian had the right-of-way over the gas-propelled vehicles. Now, it seems, the worm has turned and it is the lowly pedestrian who is to feel the weight of the law. Jay-walking, that bane of city police, is being legally attacked in many cities; the chap who is wont to "cut catty-cornered" across the streets, is to be regarded as a menace as well he should be.

Walking across street intersections "against the light" is to be taboo. In other words, traffic is to be directed according to signal lights, where such are available.

But all these measures will not take care of the thoughtless, the ill-bred, that man who does not care; the police department will continue to have to face that person and that person will have to be taught the rights of others.

Finally, the police, as well as the courts, will have to crack down on all offenders, be they drivers or pedestrians. Further, motor laws will have to be more universal in character than at present.

The writer recently had an experience in Indianapolis that bears this out. In his home city, a pedestrian who starts across an intersection with the traffic light in his favor has the legal right to complete the crossing. Not so in our Capital City; a street car came around the Illinois-Washington street corner at a rapid pace and had we not scurried as fast as our aging legs would permit, we would have been a casualty. Inquiry developed the fact that down in the Hoosier metropolis, the rule is that when a vehicle gets the green light, it is on its way!

The medical profession is deeply interested in the subject of prevention of these traffic accidents and should lend every cooperation to our law enforcing agencies to curtail them. At the same time, we believe we have the right to expect these agencies to do a better job of enforcing traffic laws which at present exist.

EDITORIAL NOTES

Counties with 100% Paid-up 1937 Memberships:

CARROLL, DEARBORN-OHIO, HANCOCK, JENNINGS, SULLIVAN, SWITZERLAND, WASHINGTON, WHITLEY

We do not often seek praise or criticism, but we do feel that we would like to know your reaction to the current issue of THE JOURNAL. Do you approve of such special numbers, and do you believe they are sufficiently informative? What is your frank opinion, favorable or otherwise? We would very much like to hear from you on the subject.

"Throw-away" journals again come in for a rap when the editor of the Connecticut State Medical *Journal* says, "Why not, as members of our state society, stop contributing to the pseudo-medical pharmaceutical journals?" Well, what are we to do, when some of our alleged "big shots" find time, plus the inclination, to air themselves in these sheets?

No doubt there will be an influx of sightseers into the Indiana flood area as soon as the ban on such has been lifted by the authorities. It is well to remind your clientele to be extremely careful on such trips, particularly in regard to their drinking water supply. It will be a long time before all the smaller communities in the flood district can be assured of a potable water supply.

The *Journal* of the Connecticut State Medical Society has added its vote in the negative to the American Editors and Authors Association. We agree with Connecticut that we already have too many organizations of similar character, and that there is little need for the services of that organization.

Jim Bloss and Joe Savage in West Virginia beat us to it in getting out a special number on venereal disease control. Their February issue is devoted to that subject, and a most creditable presentation they made of it. This subject will be in medical print constantly from now on, and we are a little proud of the fact that Indiana climbed onto the band wagon before the horses had been entirely hitched thereto.

Some time ago Indiana doctors received postal cards from chain store optical companies offering employment at various weekly wages plus commissions. It seems that the laws of Indiana regarding the practice of optometry have proved irksome to some commercial firms engaged in that work, and they are seeking every possible way out. The State Medical Board and the Better Business Bureaus are alert to the situation, and there will be more to tell about it later.

In spite of all that has been said and written on the subject, we frequently see cases of squint in young children whose parents have been advised by the family physician that the condition should be let alone—"the child will grow out of it!" While we are on the subject, too many of our folk are in the habit of referring young children to others than oculists for refraction. A child, to say nothing of adolescents and most grown-ups, fares infinitely better when refracted under some one of the many cycloplegics.

The postgraduate program of the Indiana State Medical Association and the Indiana University School of Medicine will be held in the Travertine Room of the Hotel Lincoln in Indianapolis, May tenth, to Friday, May fourteenth, inclusive. Mark your calendar right now, and plan to be in Indianapolis during that time. You cannot afford to miss this opportunity. It is arranged for your benefit. Preliminary arrangements are outlined on advertising page xxxix.

Several hundred of our members have jeopardized their medical defense, if they are depending upon the Association for that defense, by failing to pay their dues before February first. Every little while, we learn of members who seek the aid of headquarters when threatened with a suit for malpractice, only to find that they were not covered during the period of the alleged malpractice. If your dues are not already in the hands of your local county society secretary, it is most advisable that you take care of that important matter at once. "A stitch in time," you know.

We believe that THE JOURNAL does a good job of presenting the story of syphilis in this issue. Just what shall be done in Indiana remains to be seen. It is wholly up to the profession to see to it that we assume a front place in the determined battle

to be waged by the United States Public Health Service. In fact, it is the individual member, plus the concerted action of our county medical societies, that will determine the result. THE JOURNAL stands ready to offer every bit of support at its command; there will be no let-up in our activities, for we plan to keep everlastingly at it until the end is reached—and that will be far in the future.

Occasionally we have mentioned a forthcoming "Historical Number" of THE JOURNAL. We had planned to publish it in May, but the inability of some of the contributors to have their material ready for that time compels us to postpone this special number until later in the year. Special numbers of THE JOURNAL require an enormous amount of extra work, as is well known to those of us who have been working on the Venereal Disease Control Number, and unless all needed material is available, it is best not to attempt a special number. Our folk have come to expect a lot from this magazine, so when we attempt anything of a special character, we want it to be "tops."

Secretary-editor Brooksher, of the Arkansas State Medical Society, once more comes to bat with a comment on the multiplicity of medical organizations, particularly those which have "directories" for sale. His latest tirade is directed against a gentleman from Nashville, Tennessee, who seems to have the obsession that professional men are in need of a new-fangled automobile organization, one that offers legal and other aid and medical subscribers are prominently listed in a directory! The Arkansas State Medical Association, be it remembered, was responsible for a resolution passed by the A.M.A. House of Delegates at Kansas City last May declaring it unethical for a member to allow his name to be used in commercial directories. More power to Arkansas and to Brooksher!

In that readable little bulletin called *The Child*, published by the Children's Bureau in Washington, D. C., is an article concerning the adoption of children. It is a survey of the methods in vogue in the different states, and we learn that only ten states legally require social investigations of those seeking to adopt a child. Those ten are Massachusetts, Rhode Island, Delaware, Alabama, Arkansas, Minnesota, North Dakota, New Mexico, California and Oregon. Twelve states have arranged for the courts to make such investigations, two states authorize such a check, but it is not required, and the remaining states, including our own Indiana, have no laws covering the subject. In Indiana adoption requires a court procedure, but there is no law compelling the proper authorities to make an investigation of the proposed new home for the child. Our welfare folk might well look into this field.

Secretaries' Conference, March 21, 1937.

During the next few months, and certainly before the vacation season, local county medical societies should plan and present venereal disease programs. This number of THE JOURNAL will suggest many topics that may be discussed with much profit by all concerned. A Venereal Disease Control committee has been appointed for our State Association, and such committees in county medical societies, particularly the larger groups, could help in the furtherance of federal plans. As the campaign progresses, there will arise many opportunities for local service, and it is to the county societies that we must look for such help. The medical profession has a great opportunity before it, that of enlisting as a unit in the campaign now being planned as a nation-wide event. The public eye will be focused upon us ere the affair is ended; we cannot afford to appear in a poor light.

From the Third National Conference on Labor Legislation, held in Washington in November, has come an interesting report concerning child labor. Among the recommendations is one which provides that no child under the age of sixteen shall be gainfully employed, excepting only those living on farms. The report shows that since the invalidation of the NRA, children under the above-mentioned age are found to be employed in many sections of the country. Other recommendations include that, for those over sixteen, the working hours shall be limited to eight hours per day, forty hours per week; from the hours of 6 p. m. to 7 a. m., no such child shall be gainfully employed; for those from sixteen to eighteen years of age, an age certificate will be required. Physicians will heartily agree with these recommendations, for in the formative years, children should be permitted the maximum of time for play, recreation, and rest. As we have commented heretofore, we have known hundreds of children well under the age of sixteen who were employed in industry for daily periods of from ten to twelve hours. It seems strange that our Congress never has been able to muster sufficient votes to pass a worth-while child labor bill. The charge is often

and openly made that certain sections of our country, where child labor is notoriously common, have been able to stem whatever tide may be running in the direction of decent consideration for our growing children.

The Anderson (Tenn.) County Medical Society has published a small four-page program announcing its monthly meetings for the first half of the current year. On the last page are the announcements also of several of the state, national and regional medical meetings that will be held during the year 1937. The Anderson County Medical Society finds that these announcements, together with the printing of the eighteen names of the members of the society, have had a tendency to increase the percentage of attendance at their meetings.—*J. A. M. A. Bulletin Section*, Jan. 30, 1937.

One pharmaceutical house, Hoffman-LaRoche, Incorporated, has offered to contribute $20,000 per year for five years if other pharmaceutical houses will subscribe the balance of $400,000 per year to pay for a special series of medical radio broadcasts from 80 stations for 40 weeks on Sunday evenings. The purpose of the broadcasts will be to combat the propaganda favoring health insurance which various proponents of the scheme are constantly presenting to the public which will ultimately decide the question. It is proposed that the money collected in this way be turned over to the American Medical Association without reservations, and the names of contributors to the fund are not to be made public in any form of advertising. To say the least, this is an interesting proposal, and we are eager to know the outcome.

In an editorial on state medical journals, the *Maine Medical Journal* for January, 1937, says that "Each journal must be individualistic; else it fails in its basic opportunity and contribution. When effort is directed toward modeling its structure after that of a national journal, a journal devoted to specialties or even after that of a neighboring or distant state, that journal fails to meet the primary purposes of its creation and becomes a purposeless image of a sister journal." The editor points out that "the opportunity of exchange of thought and experience with the numerous journals should not be neglected." In this we fully agree, and we add that while medical journals as a whole have improved in appearance and content within the past few years to such an extent that some are almost unrecognizable, we do not believe they are "purposeless images." If an observant editor carefully scans his exchange journals and adapts the ideas gained thereby to better his own journal, that is not imagery, but progress. The line, perhaps, is rather finely drawn; however, we thoroughly agree that individualism is an essential part of any state medical journal, just as it is *the* essential part of a lay magazine.

Morris Fishbein issues a timely warning regarding the education of the public on syphilis as a part of the present campaign for venereal disease control in an editorial in The Journal of the American Medical Association for February sixth. He outlines a sensible plan concerning informative material for lay consumption: "(a) avoid the implication of reform of public morals by legislative fiat, but stress the medical aspects of the control program, (b) be scientifically sound and accurate, (c) the campaign is to be prolonged over a long period of years." He also directs attention to the campaign against tuberculosis which was started within the memory of many of us, a campaign that was carried on, consistently and intelligently, over many, many years. Speaking on the subject of syphilis, he makes the quaint yet true observation that "Since public interest is greater than can be satisfied by medical accomplishment, interest may be evaporated faster than it can be appeased. Those who wish to educate will have shortly said all there is to say and will have nothing new to offer, only repetition." The advisability of public meetings so early in this campaign may be questionable. It is due to the publicity given the subject by many metropolitan newspapers, plus the many worthwhile magazine articles now being printed and scheduled, that the public is showing an active interest in syphilis, but as is pointed out by Dr. Fishbein, this is to be a long continued campaign, and we should be a bit slow in attempting to crystallize public opinion. A good general plans his offensive over a long period, and his attack is made only when he feels that the stage is properly set. Surgeon-General Parran has said that we have much to do in preparing for this campaign; laboratory facilities must be immeasurably increased; dark-field examination must be available to a greater degree than it is at present; and, speaking frankly, some members of the medical profession must be awakened to the necessity and importance of enlisting in this fight. Yes, we have much planning to do. Let's make definite plans before we enter the battle.

THE PHYSICIAN AND THE FLOOD

By
THOMAS A. HENDRICKS
Executive Secretary
Indiana State Medical Association

Whether they occupied high executive positions in their own civic and state relief set-ups or, clad in hip-boots, made their house-to-house visits in row boats, the doctors of southern Indiana courageously, unselfishly and tirelessly answered the call to public service in the worst peacetime disaster of the state when floods covered great areas along the Ohio River and its tributaries during the last half of January.

Wholly unmindful of their own personal losses, amounting to thousands of dollars, the members of the medical profession from Lawrenceburg to Evansville battled the muddy, disease-burdened waters and gave and are today giving untold hundreds of thousands of dollars worth of free service to those who are in distress as a result of the disaster. With efficiency and ingenuity, the physicians and nurses established overnight emergency hospitals, immunization centers, and first-aid stations in practically every river town and city of the flood area, and they carried on their work from the moment the menacing waters began to rise, scarcely taking time out to eat or sleep.

As in war, behind the front line an S.O.S. grew up. Army trucks rumbled over the highways, hastening boats, sandbags, food, bedding, serums and all manner of supplies to the front to battle the onrushing waters. A constant flow of refugees, not unlike those who fled before the German invasion in France and Belgium a score of years ago, made their way to the rear. Over all of central Indiana relief stations were set up and before the month was out, thousands of homeless families were cared for.

During the early days of the disaster, Legion, military, Red Cross and all agencies were praised, but except for the repeated calls that came in over the radio of "Boat, boat urgent; doctor wanted," scarcely anything was said about the glorious part the medical profession was playing in the saving of lives. However, through the courtesy of Henry Walker, manager of the Evansville radio station, we made a trip in a coast-guard cutter through the flooded area at Evansville and had the opportunity of telling over a national hook-up of the Columbia chain of the heroic and tireless work of the doctors. As well as we can remember, our comments ran something like this:

"Everyone is truly a hero down here. You all have heard of the wonderful work of the Legion, the military, the Red Cross, the Coast Guard, but we want to say a word about the unsung hero of the flood—the local family doctor. He was on the job before the state and national agencies were on the ground. Now he has joined forces and is working with the relief agencies. Long after the flood is gone from the headlines, and the relief agencies have withdrawn and the radios of the nation are tuned in once again on Amos and Andy, the local family doctor will be down here in southern Indiana fighting disease and pestilence. He is the unsung hero."

In addition, Dr. Herman Baker, of Evansville, president-elect of the Indiana State Medical Association, introduced us to Westbrook Pegler, the columnist, and after hearing Dr. Baker describe the work of the physicians in Vanderburgh County during the emergency and seeing at first hand just what they were doing, to Pegler the Indiana doctors became perhaps the major heroes of the flood as far as this state was concerned. So impressed was he with the medical services rendered in this emergency that even a week after he had left the flood areas, he wrote some of the words which are carried in bold-face type on this page.

Warnings of an approaching unprecedented flood

"PEGLER COVERS THE RIVER FRONT"

Of all modern American commentators and columnists, none hammers out more keen-witted comment on current happenings than Westbrook Pegler. "Peg" visited southern Indiana and saw the flood at first hand. He saw doctors of southern Indiana in action during an emergency. Praise from one who never hesitates to criticize is doubly appreciated, so we say, "Thanks, Peg," for the following fine words about our Hoosier doctors who served during the flood:

Heroism of Doctors

Evansville, Jan. 30.—Evansville and the neighboring country are almost smothered in kindness and loving care. Doctors lurk in every doorway with loaded needles, ready to skewer one and all with units of bug-juice against most of the ills that flesh is heir to. It is a fine opportunity to have a baby or an appendicitis operation free, and honest bally-hoo against plagues which used to follow flood probably will have the effect of preventing those plagues. The heroic medicos have done themselves out of many an honest dollar in their priestly zeal to serve.

Housewives and Doctors Were Heroes of Flood in Indiana

Chicago, Feb. 10.—The doctors, too, sailed in and worked around the clock for there were many bad colds and quite a lot of pneumonia and there was a personal touch in all the relief work which showed the human race at its best.

in the southeastern part of the state began to come in as early as Wednesday, January seventeenth, and by the week-end, the situation along the entire Ohio River border was so acute that the Executive Committee of the Indiana State Medical Association made a formal offer of volunteer services of its members to Governor Townsend and to Dr. Verne K. Harvey. Soon many doctors and nurses from the central and northern part of the state were on service in the flood district with the Legion, the Red Cross or the Coast Guard.

When constant effort to get into telephone or telegraph communication with doctors of the southern counties failed, the Executive Committee authorized a trip to the disaster district, an account of most of which as it appeared in the Indianapolis *News* of February 3, 1937, follows:

A 700-mile trip through southern Indiana, some seventy-five miles of which was by boat, and visits to the emergency hospitals, first-aid stations and individual doctors' offices verify reports that despite the greatest disaster that has ever occurred in the history of any part of the state there is a remarkably low incidence of contagious disease and an almost total lack of loss of life.



LINCOLN HIGHWAY . . . *surveys were made by boat.*

When reconstruction work begins is the time the medical and health side of the picture comes into prominence and the long, unromantic, undramatic struggle to keep down contagion goes on. The job of doctors, nurses, chemists and sanitary engineers up to this time has been and will continue to be far from pleasant, for in their battle against sickness they necessarily must put many restrictions upon the citizens of the flood areas and issue many health bulletins and warnings.

Whole-Souled Cooperation

Whether they wear the uniform of a militia officer, are nattily dressed internes supplementing the regular local medical staffs, or are volunteer physicians from the north working under the Legion or Red Cross emblem or out of the state board of health, with scarcely any exceptions the job at hand is being done with whole-souled cooperation.

It is a far cry from the dignified days of the



LEAVENWORTH . . . *has had floods before, but not like this.*

old-time physician in top hat and long coat to the doctor of the flood era answering an emergency call in a craft cannily operated along the river banks, clad in hipboots and clothes he hadn't had time to get out of for days. Often a Legion cap to signify his former service standing replaces the ordinary civilian hat.



EVANSVILLE . . . *coliseum converted for use of flood refugees.*

From town to town the factors of disease and flood control and the usable facilities differ to such an extent that it is almost impossible to give a comprehensive picture that would be typical.



EVANSVILLE . . . *immunity clinic open twenty-four hours per day.*



LEAVENWORTH . . . *had an outdoor dispensary.*



TELL CITY. . . *wanted no typhoid.*



CANNELTON . . . *confers, cooperates and combats.*



NEW ALBANY . . . *complete emergency hospital and staff in high school building.*

SHOALS . . . *although not on the Ohio River, had its high water. Unfortunately, our pictures of the hard-working doctors failed to develop.*



NEW ALBANY . . . *physicians worked night and day by snatching forty winks whenever possible.*



LAWRENCEBURG . . . *doctors and nurses worked tirelessly.*



MADISON . . . *physicians and nurses ready and willing.*

Members of the Vanderburg County Medical Society did and are continuing to do a fine job in Evansville. Physicians and local Red Cross heads started their relief headquarters in one room of the coliseum when the war against the waters started. Then they expanded until they occupied the entire building and perfected one of the smoothest organizations in the entire area with the local health officers, military, and an immunization clinic in the City Hall just across the street, and the new Legion headquarters was transformed into a sixty-bed emergency hospital with a separate contagious disease ward to supplement the services of the regularly established hospitals. One doctor said:

"As far as water is concerned, I don't even know there is a flood. I've only been out of the coliseum to go to the City Hall and I haven't had a bath for a week."

"Throughout, Evansville had the advantage of telephone service and electric lights, and if you think these are trivialities, just get into a community where they are turned off and try to do things and get places.



NEW ALBANY . . . *complete staff in high school building.*

Newburgh Emergency Hospital

Little Newburgh had its emergency hospital in the Masonic Lodge hall and Red Cross center, where in the first five days they took care of 197 patients. The big human interest story here is the tale of the emergency call to Cypress Beach in a coast guard surf boat, where some sixty-one colored refugees were billeted, and the birth of the "water babies," a pair of dusky twins.

At Tell City two well-run emergency stations are established, one even having a dentist's chair for emergency cases. Day and night these stations run, and in addition the doctors there and at Cannelton serve many river towns such as Alton, Dexter, Derby, Rome and Tobinsport.

The Tell City-Cannelton "canal" is a much traveled waterway, in ordinary times being the Lincoln Memorial highway. At Cannelton, in the basement of the American Legion building, is as neat a medical establishment as can be found in the entire flood area.



NEWBURGH . . . *"boat—boat urgent! Doctor wanted." And babies are born in spite of floods.*

The medical situation in the smaller communities is different from that of the cities and metropolitan districts. Here the very personal and intimate relationship between physician and patient in ordinary times is carried over into disaster periods.

Leavenworth is a good example. Here is a community of about 400 people. One literally drops into the town on State Road 62. If any one thinks the days of rugged individualism are dead, he should meet the one doctor in the town, carrying his saddlebags. To our question as to what he needed, he replied:

"Young man, what we need most is a good lettin' alone."

While attending to a patient, he suddenly looked up and said: "I think my house is drifting away."

He went quietly on with his work, and when he finished, took a swing around the town in a boat to verify things.

An outsider coming into the beautiful, modern



JEFFERSONVILLE . . . *Rose Hill Emergency Hospital.*



JEFFERSONVILLE . . . *visit the doctor through a second-story window.*



AURORA . . . *had its emergency hospital in a church.*



JEFFERSONVILLE . . . *automobiles driven to supposedly safe high ground.*



TELL CITY . . . *county health officers combat typhoid.*



LEAVENWORTH . . . *"all we need is a good lettin' alone."*

New Albany High School building, which overnight was turned into the emergency hospital under the efficient direction of the members of the Floyd County Medical Society, would scarcely know that he had not stepped into a regular hospital. It is as complete an emergency medical service set-up as can be found along the river.



LEAVENWORTH . . . *physician's home.*

Many of the homes and offices of the New Albany doctors are under water, but it is Jeffersonville that makes one heartsick.



JEFFERSONVILLE . . . *Spring Street. Venetian transportation only.*

Between Jeffersonville and New Albany, the only bit of ground out of water for that whole trip is the fringe of land around the hydro-electric plant and an island is all that is visible of Clarksville, where George Rogers Clark established the first all-American settlement in Indiana back around 1780.

Racing Water Splits Aurora

The Rose Hill Emergency Hospital, one of the key points frequently mentioned in the flood reports, we found to be manned by an exhausted but game, hard-fighting medical staff mostly made up of Louisville nurses and interns who only now are beginning to get back to normal.



AURORA . . . *physicians confer.*

By the time we reached Madison, after four days out, we found it spic-and-span and cleaned up.

At Aurora and Lawrenceburg, a few days after the crest of the flood, we saw doctors trying to dig their offices and homes out of the mud. From a medical relief standpoint, the situation at Aurora was made doubly difficult because the racing waters of Hogan's creek cut the town in two sections, both needing emergency hospitalization points. In a church at Aurora, doctors established an emergency hospital that may well be rated as a "five-star" feature among the smaller communities. Their records during the first five days of the flood showed 670 out-patient cases and thirty in-patients.

Lawrenceburg, even a week after the water started to fall, was still all under water, except Greendale. It is there that the distilleries are serving so nobly as a relief and medical emergency station.



LAWRENCEBURG . . . *staff of physicians, nurses . . . emergency hospital, dispensary and commissary in distillery.*

Along the river, the highest title that can be bestowed on any one is not general or admiral or colonel, but "river rat," one who knows the channels and the hidden currents, and how to compete safely day and night with Old Man River. Someday some genius will write an undying flood yarn of high water and high adventure entitled, "The River Rat and the Doctor."

PUBLIC HEALTH AND THE FLOOD

VERNE K. HARVEY, M.D.
DIRECTOR, INDIANA STATE BOARD OF HEALTH

The Ohio River flood presented two major problems to the State Board of Health. They were, first, the emergency protection of lives and health, and second, the long-time project of sanitary rehabilitation made necessary by the damage to health protective facilities throughout the state's flood area.

The first is largely history now; the second will continue over a period of several weeks, perhaps months.

When flood conditions first arose along the Wabash and White Rivers, the State Board of Health dispatched three engineers to southwestern Indiana, and as soon as it became apparent that the situation would become serious along the Ohio, this force was augmented to nine engineers. Two were in the Lawrenceburg-Aurora area, two at the Jeffersonville-New Albany sector, two in the Tell City-Cannelton area and three in the Evansville-Mount Vernon district. These engineers were sent into the area with the principal objective of saving the public water supplies from contamination. They were instructed to, and did, work in cooperation with local health officials.

On Sunday, January 24th, the State Board of Health began to receive urgent calls from the flood area for enormous quantities of serums and vaccines. Hurried purchases of sufficient quantities to immunize thousands of persons were made. Delivery of medical supplies into the flood area and to the flood refugee camps was a difficult problem. Roads throughout the affected area were practically impassable and very dangerous. State policemen, national guardsmen, members of the American Legion, members of the Veterans of Foreign Wars and other individuals volunteered as messengers and braved untold dangers and hardships to get the supplies through. Too much credit cannot be given to them, nor to the hundreds of other volunteers who assisted official agencies.

These medical supplies were sent directly to local health officers who supervised dispensing of them. For the most part, treatments were administered free, especially at the camps for flood victims. Physicians throughout the flood area and others who volunteered in other parts of the state spent long, sleepless hours in constant work and often in great danger to see that sufferers got protection.

During the four or five days when the situation was most tense, it was necessary for the State Board of Health to purchase and handle all medical supplies, although this is not a function of the Board. This duty now has been taken over by the American Red Cross. Temporary hospitals had to be set up as the refugees poured into cities and towns that were for the most part unprepared for the emergency, and these temporary units had to be supplied immediately. Approximately $10,000 worth of medical supplies, exclusive of serums and vaccines, were rushed into the area.

The field work was, of course, directed from the offices of the State Board, and the entire board staff was on twenty-four hour duty for several days. An engineer, physician and stenographer listened in on all emergency calls so that expert attention could be given each situation.

The emergency situation has been handled and now is a matter of record, but the less spectacular problem of rehabilitation is in the process of solution.

On January 27th it was decided to establish four temporary health districts in convenient locations. At first they handled emergency work, but now are engaged in rehabilitation activities. Each is staffed with an experienced public health medical director, a chief engineer, eight to ten engineers and a public health nurse supervisor and staff. Headquarters of the district departments are at Evansville, Huntingburg, Scottsburg and Dillsboro. They will continue in operation until the public health facilities are in order again.

The principal problems faced by this department in the rehabilitation program are:

(1) Restoration of public and private water supplies.

(2) Protection of the milk and food supplies.

(3) Disposal of sewage (which includes both restoration of sewerage systems and the sanitation of homes not equipped with complete sanitary facilities).

(4) Pumping of contaminated water from basements, wells and cisterns.

The pumping project is being carried out in cooperation with the Works Progress Administration which is supplying the mechanical equipment and necessary man power.

The State Board of Health also has drafted, and is having printed, thousands of instruction sheets to tack upon houses that have been inundated. They point out the principal public health hazards and offer timely suggestions.

The rehabilitation program, like the emergency tasks of the State Board of Health, is being carried out in cooperation with local health officials. The State Board recognizes the responsibility and interest of the local health officers and its purpose throughout has been simply to be of service to these men in handling their own local problems.

Upon the request of Governor M. Clifford Townsend, the Secretary of the State Board of Health

accompanied other state officials on a tour of inspection of the flood area. The tour began February third and continued until February sixth. Others in the party with the Governor were Adjutant-General Elmer F. Straub, Wayne Coy, State Director of the WPA; Charles Wilson, his assistant and Howard Atcheson, member of the State Highway Commission.

The highest possible tribute should be paid to the members of the medical profession and to the registered nurses who volunteered their services and worked untiringly to give prompt treatment to flood victims. Many of them also aided in rescue work. Hospitals in both the flood and refugee areas donated their facilities and staffs for service to the flood victims. The American Legion, Veterans of Foreign Wars, amateur radio operators and other volunteers also deserve the highest commendation. The Board of Health also wishes to express its gratitude for the happy relations existing between itself and the offices of the Adjutant-General, the WPA, the State Police and other branches of the Division of Public Health, including the radio division, and other state departments. Without such cooperation, the public health problem incidental to the flood could not have been handled in the efficient manner that it was.

REPORTS FROM COUNTY MEDICAL SOCIETIES

At the request of the headquarters office of the Indiana State Medical Association, county society secretaries and individual physicians have sent in reports concerning the flood relief work done in their counties. While some were received too late for publication, the following reports are indicative of the spirit which prevailed in all communities:

Scott County—"Flood refugees given all medical aid needed. Regular visits made to headquarters and vaccinations given. Very good medical attention given here."

Orange County—"Orange County Medical Society worked in cooperation with the Floyd County Medical Society. Approximately 500 refugees cared for in Orange county. Temporary hospitals set up in Paoli and Orleans to care for ill refugees. General health among entire group good. All persons from flood area given typhoid vaccine by members of the Orange County Medical Society without charge."

Monroe County—"About 600 refugees from the flood district, mostly from Louisville, cared for. All persons examined as they came into town (Bloomington) and all given typhoid inoculations. Emergency hospital set up in Residence Hall (Indiana University) and regular clinic hours maintained during which members of the medical society examine and treat the visitors. No epidemic diseases and no serious illnesses reported."

Lake County—"No calls for medical service received. Local Red Cross offered cooperation. Contributions of money from the society and from the individual physicians have been generous. Three-fourths of membership of society can be reached within four hours if emergency help from this county needed."

Johnson County — "134 refugees cared for in Franklin Armory. Six local physicians devote one day at a time to caring for those requiring attention. All refugees given typhoid vaccine. Entire group quarantined because of one case of scarlet fever. General health of group excellent. Medical group worked in close harmony with the mayor's committee."

Morgan County—"Cooperated with Bloomington. No refugees sent to Martinsville. Medical supplies and two nurses sent each day to Bloomington."

Putnam County — "Sixty-four flood refugees in Greencastle quartered in American Legion home, Elks Club, and a former restaurant building. Each person examined for infectious and contagious diseases; fifty have received typhoid vaccine. Constant medical care available."

Kosciusko County—"Not engaged in any relief activities as a medical unit. Individual physicians have responded generously as part of the general public."

Wayne-Union County Medical Society — "Local members organized for duty and preparations made for reception of refugees. No active duty required as refugees were not sent to Richmond. Whole society well organized for relief work."

Daviess County—"Flood refugees from Evansville numbering 161 housed in St. Mary's school building. Refugees well fed and comfortably situated in quarters adequate to care for several times the number. Emergency hospital established in building with graduate nurses on duty at all times. Examinations made each morning. Every flood refugee has received typhoid vaccine. Very little illness. Very best of medical attention constantly available."

Boone County—"Cooperated with local Red Cross workers and made arrangements to care for 500 refugees. Armory and Masonic hall equipped to house refugees and emergency dispensary arranged to care for ill persons. No refugees sent to this county."

Gibson County—"All medical activities were well in hand and adequately cared for without undue burden placed upon any one physician. Arrangements made with all physicians in the county to give typhoid vaccine without charge when the indi-

vidual is unable to pay. Refugees grouped in hotels and other places were immunized at their respective locations. General health of the community unusually good. Probably 1,000 refugees scattered throughout the county. Response to request that all persons take typhoid shots was gratifying."

St. Joseph County—"No call upon county medical society except through the Red Cross. At the January 26th meeting of the society, the society voted its resources to be used as needed for medical relief during the flood disaster. Services volunteered, but not needed. Individual physicians have contributed money generously."

Decatur County—"In Greensburg, almost 250 refugees taken care of through the Red Cross with the medical society actively cooperating in establishing sanitary quarters. Each refugee has received typhoid vaccine. Physician called daily at each place of housing to inspect and to offer medical aid needed. Two physicians were called to duty in the floor area."

Lawrence County—"Refugees housed in Mitchell and Bedford—700 in Mitchell, 850 in Bedford. Emergency relief hospital established in each place and functioned smoothly. No sign of contagion. Typhoid vaccine and smallpox immunizations given: 1,180 typhoid inoculations and 211 smallpox immunizations have been given. More refugees expected. Everyone cooperating ideally."

Adams County—"No definite program for medical relief as only refugees in county are housed with relatives and no relief problem exists. One physician called to duty in Louisville."

Delaware-Blackford County—"Mobile hospital unit with complete emergency equipment was outfitted and sent to the flood area under auspices of county medical society and local chapter of Red Cross. Four physicians and three nurses accompanied the hospital unit. Physicians well organized and ready to assist when called."

Grant County—"Fifteen or twenty refugees here were asked to assemble for purposes of immunization. Local medical society members cooperated to fullest extent with local Red Cross. Typhoid vaccinations given to refugees."

Steuben County—"People of Steuben County have sent more than fifty tons of provisions and more than $1,000 in cash to flood area. Physicians contributed liberally with money and medical supplies."

Sullivan County—"No refugees sent into county. Emergency medical care arranged for through county society committee, but no calls for service received."

Allen County—"Three members on duty in southern Indiana flood area. Medical relief committee organized to cooperate with Red Cross. No requests for service."

Shelby County—"Prepared medical relief for 250 refugees and members of society were on "standby" orders. No calls for service received. Provisions sent to Lawrenceburg."

Wabash County — "No activities carried out in this county. No requests for service."

Hendricks County—"No refugees sent here. Work organized and physicians ready to respond if needed. Generous contributions of money."

Tippecanoe County—"County society well organized for work. All refugees immunized for typhoid and smallpox. All well cared for. Prepared to care for many more refugees. Interns from hospitals sent to flood area for active duty."

Madison County—"Thoroughly organized to care for refugees. Accommodations made available for several hundred. Active cooperation with Red Cross. Four physicians and five nurses on active duty in flood area."

Fountain-Warren County—Organized to care for any refugees sent in. Active cooperation with American Red Cross in supplying food and clothing."

Montgomery County—"Plans made by physicians to care for any flood refugees sent here; none received."

Fulton County—"All relief work handled through Red Cross and Kiwanis Club. Fulton County Medical Society cooperated with Kiwanis Club in financial contributions."

Parke-Vermillion County — "Food, clothing and cash contributions made to Red Cross and American Legion in cooperation with local citizens. No refugees sent here because of local disease epidemic. Physicians ready for any emergency."

Marion County — "Approximately 970 refugees housed in state fairgrounds, under direct supervision of Red Cross with medical attendance supplied by Red Cross doctors and physicians from the City Hospital, as well as volunteer physicians. Number of Indianapolis physicians on active duty in flood area."

Randolph County—"No medical relief except liberal private cash donations; all members of medical and nursing staffs stood by in readiness for any emergency."

Vanderburgh County — Spread of disease controlled by establishment of fifteen clinics for immunization of citizens against typhoid. Organization and work of this society is described in another article.

Posey County—In Mt. Vernon, 2,500 flood refugees were cared for through the efficient functioning of the Posey County Medical Society. Disease effectively held in check. Emergency hospital established in memorial coliseum. All refugees inoculated.

Pike County — "We are giving flood refugees typhoid serum. That is all the medical relief we have been called upon to give."

Jay County—Physicians sent from Portland to flood area for active duty.

Jefferson County — "Medical relief activities in Jefferson County have been rather limited. On January 25, 1937, an emergency hospital was established by local officials and relief authorities. This was taken over after a few days by the Red Cross. About 1,900 persons have had typhoid immunization in Madison, all given by those connected with the emergency hospital. They have also given a number of immunizations in other parts of the county and also some along the river in Kentucky. No disease of epidemic proportions. Indigent persons have been cared for by the township trustee, as usual."

Switzerland County — "The doctors and county nurses all are working together and everyone has been taken care of in regard to food, medical attention and vaccination. The Red Cross is active and doing its part splendidly. No one has suffered for want of attention."

Spencer County—"We have just witnessed the most disastrous flood in U. S. history. Homes and farms, always considered safe, were covered with six to ten feet of water. Through heroic work, no lives were lost, but thousands of head of live stock were drowned. Coast guard and other motor boats were most helpful. The town of Grandview, six miles from Rockport, was completely covered with water; all business houses and homes are practically ruined. Rockport is the highest point along the flooded Ohio; consequently we were swamped with refugees, but with the aid of the State Board of Health, Red Cross, doctors and nurses, more than 5,000 people were immunized, and no outbreak of contagious diseases developed. Believe that ninety per cent of all refugees in Spencer County have been immunized against typhoid."

Dearborn County, Lawrenceburg—Levee broke late in the night (January 17); medical supplies moved to bottling plant of the Seagram distillery by plant physician. First aid room in the main office of the distillery established and accident and exposure cases treated. Temporarily hospital set up in main office with accommodations for 35. Commisary established in one of plant buildings. One hundred and fifty cots were put in warehouse and basement of main office. Refugees, wet and hungry, were cared for; some stopped at the plant for rest and food before moving farther north. Local medical men organized, and first aid facilities at Old Quaker distillery were enlarged into a temporary hospital. National Guard doctors and nurses brought invaluable help. Officials of distillery made every effort to supply all needs. Two or three pneumonia patients treated with oxygen with improvised nasal catheters; all recovered. Medical situation never out of control, though Lawrenceburg was almost completely inundated and for several days the only power came from distillery plant boilers; when flood waters drowned boiler fires, plant engineers hooked two locomotives to plant steam line and power never was interrupted. These locomotives were used for five days and at one time water was within a few inches of their fire boxes. Emergency surgical work was done at the emergency hospital and one appendectomy was done in a home; typhoid immunization shots given, and on February third no typhoid had been reported. Constant supply of good water available from deep wells at the distillery and from Greendale. Local organization of physicians functioned smoothly; doctors and nurses sent by Red Cross and National Guard were invaluable.

Vigo County—Took care of 1,500 refugees.

THE ANNUAL SECRETARIES' CONFERENCE WILL BE HELD AT THE COLUMBIA CLUB IN INDIANAPOLIS, SUNDAY, MARCH 21, 1937.

DIPHTHERIA REPORT FOR JANUARY, 1937

Eight deaths from diphtheria in the month of January compares favorably with twenty-six for January of last year. In the past six months, as a matter of fact, diphtheria deaths have been definitely lower than usual. Age distribution shows five children under four years of age, two children ten years old, and one twenty-three years old. The rate of distribution by counties follows:

Daviess	2
Howard	1
Jefferson	1
Lake	1
Marion	1
Tippecanoe	1
Vanderburgh	1

PRESIDENT'S PAGE

These are trying times in many respects—in fact, in most respects, and as citizens of our communities as well as physicians, we are finding our positions more arduous, more trying, and more responsible every day. But, if I may paraphrase a rather popular song of a year or two ago, "that's why real physicians are born."

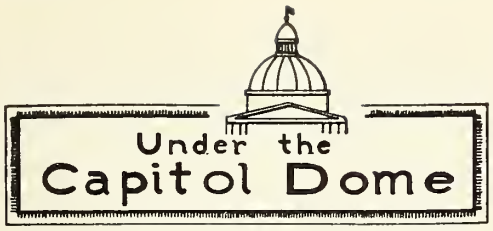
In my opinion, undaunted courage, understanding, and resolution are the primary requisites for withstanding intelligently and working with, as we often must, many of the foibles created and given prominence by the demands of a changing society and public. The past fifty years have witnessed stupendous progress in the workings of our profession and of the healing art. What years of achievement they have been!

The same fifty years, or at least thirty-five of them, have seen changes in the ways of life, in thinking, in ideals and objectives that are as far-reaching and important as those which have affected the practice of medicine and the other sciences. No one, of course, can tell what the future holds, or where the end will be. Naturally, we seek or desire no end to genuine advancement in any line, but I urge that we do seek rationalization and equilibrium in all things. Let us not be too easily swayed by untried social theories and propositions. Let us continue to demand in no uncertain way that the spotlight of caution, study, analysis and research be strongly focused on any and all matters affecting the public health, the general public good and our intimate responsibilities to our patients and fellow citizens. As Dr. William Mayo says: "The three great learned professions are theology, law, and medicine. The church too often substitutes man-made creeds for the teachings of the Sermon on the Mount. The law is necessarily one generation behind the social life of the people, as legal opinions are to a large extent concerned with established precedents, the yesterdays of life. Medicine constantly advances, and tomorrow is the great day."

* * * * *

Too much credit cannot be bestowed upon the doctors of southern Indiana for their courage, their tireless energy, their genius, their ingenuity and their public-spirited service during the desperate battle they have waged against the disease-burdened waters that have swept over a large part of their section of the state. The record in the low incidence of death and disease established in the face of disaster signifies the splendid cooperation in this emergency among all agencies in Indiana, the organized medical profession, the military, the American Legion, the Red Cross and the Indiana public health service under the direction of Dr. Verne K. Harvey who has proved himself to be a most efficient and capable executive officer. Doctors of southern Indiana, the State and the Nation are proud of you!

Edmund D Cleary



INCIDENCE OF VENEREAL DISEASES IN ENTRANTS TO GIRLS' SCHOOL AT CLERMONT

Sixty-five per cent of the girls who enter the Indiana Girls' School at Clermont have gonorrhea and twelve and one-half per cent have syphilis, according to the report of Dr. Fernande H. Luck, physician, for the last fiscal year.

Girls in this school are committed by the juvenile courts throughout the state, upon a charge, from the ages of ten to eighteen, and every girl committed is a ward of the school until she is twenty.

Concerning the type of girls received at the school, the school's annual report said: "She comes of generations of untrained, undisciplined, unpurposeful people. She is without definite moral education or training. She is the girl with whom the home, the public schools, the probation officers, and every other agency has failed. She is retarded and has the failure habit as well as the 'getting by' habit."

At the close of the fiscal year there were 276 girls in the institution. Ninety-six had been committed by the courts during the year, and of these, eighty-four were white, and twelve were colored. Of the total committed, eighty-five were committed for incorrigibility, and eleven for felonies.

The report showed the mental condition of those committed during the fiscal year as follows: fair, thirty; good, fifty-six; poor, five; and feebleminded, five.

As to physical condition, the report showed: fair, twenty; good, sixty-nine; and poor, seven. Thirty-nine used cigarettes; thirty-two used liquor, and forty-three used neither, before entering the institution.

The financial condition of homes from which the girls came showed that five were from "fair" homes, thirty-one from homes with "sufficiency," twenty-five from "poor" families, thirty-three from "paupers." Two were committed from other institutions.

The fathers of twenty-eight of the girls were intemperate, the mothers of four were so classified, while both parents of ten were classed as intemperate. Both parents of fifty-four girls were temperate. Parents of thirty-five of the newly admitted girls were living together, while they were divorced in the cases of only eighteen.

INCIDENCE OF VENEREAL DISEASE IN BOYS' SCHOOL

A relatively small amount of venereal disease is shown for the boys in the Indiana Boys' School at Plainfield. The annual report of Dr. M. M. Aiken, physician at the institution, does not give the percentage of venereal disease cases among boys received at that institution. However, his report does show that eighteen syphilitics were being treated at the close of the fiscal year. There were 520 boys in the school at that time. Of these, 112 were colored. Dr. Aiken's report added that "cases of gonorrhea are seen occasionally but are not common."

MEDICAL CARE FOR AGED

Wayne Coy, acting administrator of the state department of public welfare, has issued a statement setting out that persons receiving old age assistance payments that are not sufficient to meet their medical needs may apply for and receive assistance from the townships in which they live.

"Where an old age recipient has a chronic ailment and it is possible to measure his medical need from month to month, then it is entirely within the province of the county welfare department to include in the monthly grant payment for all of the medical needs, providing the maximum award for all needs is not greater than $30 per month," Mr. Coy's statement said. "I am certain that it is the intention of Indiana laws applying to township trustees and to aged assistance granted by county welfare departments that the medical needs of the aged shall be taken care of. Officials of county departments and the township trustees in the county should cooperate in order to insure that every aged person does receive proper medical attention."

Mr. Coy's statement was based upon a legal opinion received recently from the office of Omer S. Jackson, attorney general.

ABSTRACT

Sources of Error in Blood Examinations.—Orsos (Munchener Medizinische Wochenschrift, October 25, 1936) says that inconclusive laboratory reports are often due to poor technique in collecting and handling blood. The chief source of error is spoiling due to the use of non-sterile instruments and containers. The use of alcohol in cleansing instruments and the inclusion of traces of alcohol in the specimen tend to produce a positive reaction. Most misleading are the errors caused by the presence of salvarsan or tannic acid in the serum. Care should therefore be taken not to draw the blood immediately after salvarsan treatment, and not to use cork stoppers in the test tube. The changes produced by acids or alkalis used in cleansing instruments are of less significance.—*Urologic and Cutaneous Review*, February, 1937, p. 143.

DEATHS

Anexamander M. Hayden, M.D., of Evansville, died of pneumonia in an Indianapolis hospital, February ninth, aged eighty-four years. Dr. Hayden and his family had gone to Indianapolis after Ohio flood waters reached their home in Evansville.

Dr. Hayden was born in Virginia and was a descendant of a long line of physicians dating back to 1630 when Haydens settled in Massachusetts. He graduated from the Starling Medical College in Columbus, Ohio, in 1875, and he was the last surviving member of his class. In 1876 he opened his office in Evansville where he remained in practice for sixty years. He was an associate on the staff of the Hospital Medical College in Evansville from 1882 to 1886 when the college was merged with other schools. He opened his own fifty-bed hospital in 1898 and managed it successfully until 1928 when he discontinued it. He did post-graduate work at various times, studying in New York, Chicago, and most of the important European medical centers.

Dr. Hayden always was active in medical organization work. He was an honorary member of the Vanderburgh County Medical Society which he served as president in 1897, and he was vice-president of the Indiana State Medical Association in 1900 and 1901. He was a Fellow of the American Medical Association, a Fellow of the American College of Surgeons, a member of the Ohio Valley Medical Society and a member of the Mississippi Valley Medical Society. He served eight years as president of the Evansville board of health.

James Henry Brill, M.D., of Indianapolis, died February tenth, aged ninety-three years. Dr. Brill had retired from practice. He attended Asbury College (now DePauw) and graduated from Miami Medical College, Cincinnati, in 1872.

Thomas DeWitt Peters, M.D., of Flora, died February tenth, aged fifty-one years. Dr. Peters had practiced in Flora for twenty-five years. He graduated from the Indiana Medical College, Medical Department of Purdue University, in 1906, and was a member of the Carroll County Medical Society, the Indiana State Medical Association and the American Medical Association.

Carl Henry Cunningham, M.D., of Indianapolis, died February tenth, aged forty-one years. Born in Loogootee, Dr. Cunningham attended Indiana University School of Medicine, from which he graduated in 1928, and following internships at the St. Vincent's Hospital in Indianapolis and St. Elizabeth's Hospital in Lafayette, he established his office in Indianapolis. He was a member of the Indianapolis Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

Clyde D. Schurtz, M.D., of Alexandria, died January twenty-seventh, aged seventy-seven years. He had practiced in Alexandria for forty-five years. He graduated from Rush Medical College, University of Chicago, in 1885, and was a member of the Madison County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. His body was returned to his hown town, White Pigeon, Michigan, for burial.

John F. McCool, M.D., of Indianapolis, died January twenty-first, aged fifty-three years. Dr. McCool specialized in otolaryngology. He graduated from the Indiana Medical College, School of Medicine of Purdue University, Indianapolis, in 1906, and had practiced in Indianapolis for thirty-one years. He was a member of the Indianapolis Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

Edmon A. Gilson, M.D., of Hammond, died suddenly while on a vacation trip in San Antonio, Texas, January twenty-third. Dr. Gilson was sixty-seven years of age. He graduated from the Toledo Medical College in 1905.

Eva A. Cropper, M.D., of Indianapolis, died January twenty-third, aged eighty-two years. Dr. Cropper had practiced in Indianapolis more than forty-five years before she retired at eighty years. She was one of the first women graduates of the old Fort Wayne Medical College; she graduated in 1883.

Thomas A. Dugdale, M.D., of South Bend, died February eleventh, from pneumonia. Dr. Dugdale was fifty-three years old. He graduated from the Indiana University School of Medicine, Bloomington and Indianapolis, in 1908.

William Cluthe, M.D., retired chemist and physician of Evansville, died January sixteenth, aged eighty-nine years. Dr. Cluthe had retired from active practice in 1911. He was born in Germany and attended preliminary schools there. He worked as a chemist in Paris and London, and came to the United States at the age of twenty. He attended the Medical College of Ohio, Cincinnati, graduatd in 1875, and practiced at Tell City, Indiana, from 1880 to 1911, where he was active in public and civic work. Dr. Cluthe is credited with being one of the organizers of the Perry County Medical Society.

Emanuel Stockberger, physician for nearly a half century at Milford, Indiana, died January twenty-fifth at his home there. He was eighty-four years old.

John D. Malott, M.D., of Converse, died February second, aged sixty-five years. Dr. Malott had been ill for several months. He graduated from the Indiana Medical College, Indianapolis, in 1898. He had practiced medicine in Converse since 1917. He was a member of the Miami County Medical Society, the Indiana State Medical Association and the American Medical Association.

Bertha Anne Clouse, M.D., of Columbus, died January twenty-first, aged sixty-eight. Dr. Clouse was graduated from Northwestern University Woman's Medical School, Chicago, in 1900. She practiced at Hope, Indiana, then established her practice in Columbus where she had been city school physician for the past nineteen years. She was a member of the Bartholomew County Medical Society, the Indiana State Medical Association and the American Medical Association.

Otis M. Keyes, M.D., of Dana, died January twenty-fourth, aged eighty-two years. Dr. Keyes had retired from active practice. He graduated from the Kentucky School of Medicine, Louisville, in 1877. He is survived by his son, Dr. Paul Keyes, of Indianapolis.

Martin T. Plooghe, M.D., of Kempton, died January eighteenth after a short illness. He had retired from active practice a few years ago. Dr. Plouge was seventy-six years old. He graduated from the Central College of Physicians and Surgeons in Indianapolis in 1898.

HOOSIER NOTES

Dr. V. G. McDonald, of Anderson, is convalescing from a recent operation for appendicitis.

Dr. David King, formerly of Anderson, is now located in West Virginia.

Dr. George Moore has moved from Muncie to Anderson where he will conduct a surgical practice.

Dr. M. E. Klingler, of Garrett, and Miss Ruth Harsh, of Garrett, were married in January.

Dr. Bonnell M. Souder, of Auburn, was guest speaker at the January dinner meeting of the Gary Business and Professional Women's Club.

Dr. A. Davis, of Anderson, has joined the staff of the Woodlawn Hospital at Rochester as assistant to Dr. Milton E. Leckrone.

Dr. J. W. Kemp, of Roanoke, suffered a broken hip and injuries to his head when he fell at his home, January twenty-fourth.

Dr. G. A. Owsley, of Hartford City, has purchased the property of the late Dr. W. A. Hollis, which has recently been occupied by Dr. W. W. Ayres. Dr. Owsley is remodeling the building.

P. Blakiston's Son and Co., Inc., medical book publishers of Philadelphia, have announced the death of their president, Kenneth M. Blakiston, on January 19, 1937.

Warner Brothers, the producers of "The Story of Louis Pasteur," have produced a screen version of Lloyd C. Douglas' novel "Green Light" which tells of the struggle of a young physician to conquer Rocky Mountain Spotted Fever.

The Indiana Dietetic Association met in Indianapolis January fifteenth. Dr. John E. Dalton talked on "Cosmetics" and Dr. O. M. Helmer talked on "The Nature of the Vitamin B Complex."

Dr. Charles F. Abell is practicing in Marion where he is associated with Dr. E. O. Harrold.

Dr. L. H. Conley, of Gas City, has retired from active practice after serving that community for forty-four years, and after more than fifty years of medical practice. Dr. Conley has twice served as mayor of Gas City and has been actively interested in the city from the time of its boom-days.

At the meeting of the Marion County Medical Society Woman's Auxiliary, held in Indianapolis at the Antlers Hotel, January twenty-second, Dr. R. N. Harger spoke on "Semi-Science and Quackery."

The Mid-West Conference on Occupational Disease will be held at the Hotel Statler in Detroit, May 3 to 7, in conjunction with the annual meetings of the American Association of Industrial Physicians and Surgeons, and the Michigan Association of Industrial Physicians and Surgeons.

Dr. W. M. Stanley, of the Rockefeller Institute, who received the annual $1,000 prize of the American Academy for the Advancement of Science, is a native Hoosier. He was born in Ridgeville, attended high school in Richmond and went to Earlham College. Many Indiana physicians will remember him as an athletic star.

Dr. H. F. Flannigan who has been with the Miller clinic at Hobart for the past three years has moved to Lagrange where he is associated with Dr. C. H. Schultz.

The next meeting of the Muncie Academy of Medicine will be held at the Hotel Roberts in Muncie, March ninth. Dr. Charles Mayo, Jr., of Rochester, Minnesota, will address the group on "Surgery of the Colon." An invitation is extended to all interested members of the profession.

The J. B. Lippincott Company, medical book publishers of Philadelphia, have announced the death of William A. Widmer who had served the company for a period of thirty-seven years. The Lippincott Company also has announced the association of Theodore A. Phillips as manager of sales in the medical and nursing division.

The medical staff of the Menninger Clinic will conduct its third annual postgraduate course on "Neuropsychiatry in General Practice" April 19 to 24, inclusive, at the Menninger Clinic, Topeka, Kansas. The course will include a brief introduction to the fields of neurology and psychiatry and a specific application of this knowledge to the large group of cases of psychoneuroses, psychoses and psychogenic and neurological disorders which every physician meets in his daily practice. Suggestions made by those who took the course last year have been embodied in the program for this year so that it is applicable to the most common practical problems of the physician. Several guest speakers will appear at the evening session.

In addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Calco Chemical Co.
  Crystal Violet Medicinal-Calco.
    Crystal Violet Jelly-Calco.
Eli Lilly & Co.
  Ampoules Pentobarbital Sodium-Lilly, 0.5 Gm. (7½ grains)
Merck & Co., Inc.
  Gold and Sodium Thiosulfate—Merck.
    Ampuls Gold Sodium Thiosulfate—Merck, 0.01 Gm.
    Ampuls Gold Sodium Thiosulfate—Merck, 0.025 Gm.
    Ampuls Gold Sodium Thiosulfate—Merck, 0.05 Gm.
    Ampuls Gold Sodium Thiosulfate—Merck, 0.10 Gm.
    Ampuls Gold Sodium Thiosulfate—Merck, 0.20 Gm.
    Ampuls Gold Sodium Thiosulfate—Merck, 0.25 Gm.
    Ampuls Gold Sodium Thiosulfate—Merck, 0.30 Gm.
    Ampuls Gold Sodium Thiosulfate—Merck, 0.50 Gm.
    Ampuls Gold Sodium Thiosulfate—Merck, 1.0 Gm.
  Ichthyol-Merck.
Riedel-de Haen, Inc.
  Pernoston Tablets, 3 grains.
Sharp & Dohme, Inc.
  Diphtheria Toxoid—Alum Precipitated.
Nonproprietary Articles.
  Crystal Violet.

INDIANA UNIVERSITY NEWS NOTES

Mrs. Ikko Matsumoto, of Indianapolis, has presented to the Indiana University medical center of Indianapolis a bronze medallion portrait of the late Dr. Edward Francis Hodges, who before his death in 1916 was a member of the faculty of the Indiana University School of Medicine. The portrait of Dr. Hodges was done by Ikko Matsumoto, who died two years ago. He was the husband of the donor and was one of the most highly skilled workers in precious metals in Indiana.

Dr. Hodges received his A.B. degree in 1871 from Harvard University and in 1874 received his first medical degree from Georgetown University and in 1875 he entered Harvard Medical School and in two years won his second medical degree.

He came to Indianapolis in 1880 and engaged in the general practice of medicine until his death in 1916. During that period he attained a high position in his profession and also in medical education. He was a member of the faculty of the

Indiana Dental College, now the Indiana University School of Dentistry, and for more than 25 years he was on the faculty of the Indiana University School of Medicine. He was pathologist at the Central State Hospital, obstetrical surgeon at the Indianapolis City Hospital and occupied various other positions in the professional life of his time. In addition to his professional accomplishments, he was a gem expert of exceptional knowledge, a botanist and an authority on the American Indian.

Thirty basic military students are now enrolled in the R.O.T.C. medical unit recently installed at Indiana University. First-year basic instruction of the medical unit will be given at the Bloomington division of the university and the remaining three in Indianapolis. The course will consist of 39 hours of military instruction and 51 hours of medical work.

Students completing the R.O.T.C. medical course will be commissioned as first lieutenants in the Medical Reserve Corps of the United States Army on graduation. Lieutenant Colonel Wilson C. von Kessler will be in charge at Indianapolis and will assist in additional instruction of the unit in Bloomington.

Enrollment for the second semester which has just opened at Indiana University represented a peak of 9,980 students on February 10 for resident and extension courses, according to consolidated reports from all divisions announced at the university's administrative offices in Bloomington. The enrollment is divided almost equally between resident and extension classes, with 5,031 students on the campus here and at Indianapolis and 4,949 in extension classes in Indianapolis, Fort Wayne, Whiting, Hammond, East Chicago, South Bend and many other cities and towns. The present total of 9,980 will be largely increased before the spring semester registration is completed.

Registrar Thomas A. Cookson announced that up to February 10, 4,287 students were registered in Bloomington and 744 in Indianapolis. Mark P. Helm, registrar of the medical and nurses' training schools, Indianapolis, reported an enrollment of 494 students. Dr. G. D. Timmons, secretary of the dental faculty, reported 190 students at the dental school in Indianapolis. Professor Louis Evans, director of the training course for social work, announced that 60 students are enrolled in that department.

Professor R. E. Cavanaugh, director of the university's extension division, reported that 2,900 students are enrolled in extension classes so far, with many more yet to be registered as courses open within the next few days throughout the state. Miss Louise Rogers, in charge of the extension division's bureau of correspondence study, reported 2,049 students enrolled for correspondence courses.

SOCIETIES AND INSTITUTIONS

THE INDIANA STATE MEDICAL ASSOCIATION

EXECUTIVE COMMITTEE

January 10, 1937.

Meeting called to order at 10:45 a. m.

Roll call showed the following present: C. A. Nafe, M.D., chairman; H. H. Wheeler, M.D.; E. D. Clark, M.D.; H. M. Baker, M.D.; O. O. Alexander, M.D.; A. F. Weyerbacher, M.D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary.

Minutes of the meeting of December 6, 1936, approved on the motion of Dr. Clark.

The monthly statements of Receipts and Expenditures and report of the Budget for the Association committees and for THE JOURNAL for December were presented.

Membership Report

Number of members on January 9, 1937	988
Number of members on January 9, 1936	832
Gain over last year	156
Number of members December 31, 1936	2,832

Treasurer's Office

(1) Report made that George S. Olive and Company had completed the annual audit of the books. Statement of the auditor shows that the net income for the year is $3,235.07.

(2) The auditor suggested that the Association file a claim for exemption from the payment of the social security tax. The committee instructed Albert Stump, attorney for the Association, to follow this suggestion.

(3) Two $1,000 state highway aid bonds matured January 1, 1937. The treasurer was instructed to reinvest these funds in federal government securities.

(4) Letter received by the treasurer from the Schloss Bros. Investment Company in regard to the Rokeby and Beachton Court Apartment bonds, saying that there has been some price appreciation in these securities during the past year due to better rental conditions. The committee felt that it would be well to hold these bonds.

Clean-Up on 1936 Session at South Bend

(1) The Constitution and By-Laws were printed in the January JOURNAL. These will be reprinted before the next meeting of the House of Delegates at French Lick and then will be brought up for final action at the first meeting of the House of Delegates at that time.

(2) Resolution received from the Tippecanoe County Medical Society against automobile and other exhibits at the state meeting. The Executive Committee could see no objection to taking exhibits from reputable commercial organizations even though they do not have to do with the technical services rendered by the physicians. Upon the motion of Dr. Baker, the committee referred this matter to the Council for decision at its midwinter meeting.

1937 Session at French Lick

(1) Preliminary draft of commercial exhibit shows 32 spaces as against 38 at the South Bend meeting.

(2) Letters received from the Exhibitors Association opposing prizes and attendance tickets.

(3) The housing of the scientific exhibits is to be brought to the attention of Dr. Culbertson and Dr. Banks and they are to recommend whether or not a scientific exhibit should be held this year.

Graduate Education

(1) State committee is to be named by Dr. Clark after a conference with Dr. Gatch.

(2) Dr. Clark reported that under certain conditions, $2,500 would be available for "refresher" courses in Indiana from the Maternal and Child Welfare Fund.

Secretaries' Conference

(1) Special legislative committee meeting to be attended by county legislative committeemen and secretaries of county medical societies and state legislative committeemen to be held at 10:30.

(2) Letter received from Governor Townsend stating that he will be present at the meeting if possible.

(3) It was moved by Dr. Clark and seconded by Dr. Wheeler that those who attend the legislative meeting be invited to stay for dinner in the evening.

(4) Dr. B. J. Larkin was appointed by Dr. Clark as an additional member of the legislative committee.

Legislative, Legal and Social Security Matters

(1) Report of the meeting with Governor Townsend in regard to safety legislation made by Dr. Nafe to the committee.

(2) A copy of Mr. Stump's answer to Dr. Davidson's communication in regard to changes in the Medical Practice Act brought to the attention of the committee.

(3) Report made upon the meeting of the Advisory Health Council and the legislative recommendations of the Council.

(4) Letter received from Dr. Davidson in regard to lay organizations practicing medicine. Dr. Davidson would like to make a test case in Indiana of this.

Socialization of Medicine

(1) The secretary reported that Dr. West had made an informal statement over the telephone that although many rumors existed concerning the activity in Washington to bring about socialized medicine, he felt that all these rumors should be taken with a grain of salt. In fact, he stated that he felt the administration would not attempt or back such legislation at this time.

(2) Resettlement Administration problems were discussed by the committee, Mr. M. E. Hays, Indianapolis Regional Cooperative Specialist, and Dr. R. C. Williams, National Medical Director of the Resettlement Administration, appearing before the committee. Dr. Williams is to draw up a statement of principles that can be approved by the State Medical Association and followed out by the Resettlement Administration in seeing that medical services are provided for clients of the Resettlement Administration *only*. This statement is to be sent to the members of the committee and to the American Medical Association for comment before it is given any official approval.

(3) *Immunization Campaigns.* The Executive Committee approved in principle the letter received from the Medical Society of the County of Nassau (New York) which advises against formation of clinics for these campaigns. The committee feels that wherever possible, immunization should be given in the physician's own office or in the patient's home.

(4) *American Foundation Studies in Government.* Letter received from this group stating that a survey of medical services as reported by heads of lay health organizations is to be made. This is the same group which recently wrote to physicians asking their opinion in regard to medical services in their various localities. The secretary was instructed to forward this letter to Dr. West for his information.

Group Hospitalization and Health Insurance

(1) A memorandum from the Public Relations Bureau of the New York State Medical Society quoting statements that appeared in *Medical Economics* in regard to Senator Fred VanNuys of Indiana favoring socialized medicine was brought to the attention of the committee. The secretary was instructed to write to Senator VanNuys telling him of this article in *Medical Economics* intimating that he favored socialized medicine. The members of the Executive Committee all felt that there must be some mistake in this as Senator VanNuys always has stated that he is not in favor of any health insurance movements which would place medicine in political hands.

(2) *Dr. Heyd's Statement Against Health Insurance.* The statement made by Dr. Charles Gordon Heyd, president of the American Medical Association, against forms of health insurance was brought to the attention of the committee. The newspaper article carrying Dr. Heyd's statement follows, in part: "Dr. Heyd said health insurance systems developed in Germany and England were less efficient and 'put a premium on malingering and extension of days of illness.' The outstanding defect of the British and German systems, he said, is that they 'created a superior type of medical service for the well to do and a substandard type for those in the lower economic brackets.' * * * Condemning any form of cash benefits for sickness, Dr. Heyd said the average loss of time of workers for illness in the United States was only six and one-half days as compared with thirteen in Germany and eleven and one-half in England."

Medical Economics

(1) Letter from Dr. M. A. Austin, councilor of the Eighth District, brought to the attention of the committee.

(2) *Indiana University Psychology Clinics.* Newspaper articles in regard to the University Psychology Clinics brought to the attention of the committee. Upon the motion of Dr. Clark, seconded by Dr. Wheeler, these notices were to be sent to the Mental Hygiene Committee of the Indiana State Medical Association for its information and for any action this committee recommends in this matter.

Indigent Sick

(1) The following letters from Mr. Albert Hahn, administrator of the Protestant Deaconess Hospital, and the Evansville Hospital Council in regard to the payment to hospitals for services rendered in indigent cases were brought to the attention of the committee:

"At the request of Dr. Herman Baker, president-elect of the Indiana Medical Association, I am sending you two copies of a communication which is being mailed to each township trustee in southern Indiana and Illinois using the services of the Evansville hospitals.

"This letter does not apply to township cases in Vanderburgh County where our hospital is located.

(Signed) Albert G. Hahn, Administrator."

"TO: All Township Trustees.

"Gentlemen:

"In accordance with the mutual agreement with the members of the medical and surgical staff of the three general hospitals in Evansville, we hereby inform you that for any township cases assigned to the Evansville hospitals, a permit for the medical and surgical services must be included.

"The doctors of Evansville have been most generous and have agreed to serve these cases at one-half the minimum rate as established by the Vanderburgh County Medical Society.

"The admitting departments of these hospitals will request that all township cases bring two permits—one for the hospital and one for the doctors as mentioned above.

(Signed) Evansville Hospital Council,
Sister M. Dolores,
Superintendent, St. Mary's Hospital;
James Y. Welborn,
Superintendent, Welborn-Walker Hospital;
Albert G. Hahn,
Administrator, Deaconess Hospital."

(2) Letter received from a doctor in the northern part of the state saying that WPA cases were being sent to specified doctors. A check-up with the relief commissioner shows that this was not a state policy and hence the Executive Committee suggested that this situation should be handled by the local county medical society.

Annual Midwinter Meeting of the Council

(1) It was the opinion of the Executive Committee that the Council should clarify the duties of the Editorial Board.

(2) The Executive Committee discussed in general the policy of having the Editorial Board members elected for three years rather than for five years as is now done. No formal action was taken upon this matter.

(3) The Executive Committee felt that the chairman of the Legislative Committee, the attorney of the Association, and the chairmen of key committees should be invited to attend the Council meeting.

Collection of Bills by Physicians

The ——— County Medical Society is contemplating the printing of a dead beat list in the daily papers. It was the opinion of the attorney that this might be a very dangerous procedure.

Death of Former President of State Association

Letter received from the family of Dr. J. C. Sexton, past president of the Indiana State Medical Association, thanking the Association for flowers. The president and the secretary of the Association attended Dr. Sexton's funeral.

Syphilis Control

(1) Report of the State Association Committee on Syphilis Control brought to the attention of the Committee. This report is to be published in the next issue of THE JOURNAL.

(2) Article by George Gallup stating that the country is in favor of a bold venereal disease fight and the establishment of government clinics was brought to the attention of the committee.

New Mimeograph for Office

The executive secretary was instructed to purchase a new mimeograph for the office if there is need for one. Motion was made by Dr. Clark, seconded by Dr. Wheeler.

The Journal

(1) Letter from the American Society for the Control of Cancer asking that advertising space be donated brought to the attention of the committee. The committee felt that no action should be taken in this matter until it is referred to the committee of Dr. William Kennedy, which is in charge of the cancer control program in Indiana.

(2) The committee went on record rejecting the request of the *Medical Press* of New York that THE JOURNAL carry a review of a book on sex technique.

(3) Attention of the committee called to the fact that the interns of several Indianapolis hospitals have no access to THE JOURNAL. The committee suggested that each hospital be written to see if it desires to subscribe to THE JOURNAL, the rate to be the same as the medical student rate of $1.00 per year.

(4) *Old Accounts.* The members of the committee made recommendation upon the disposition of eight old accounts, recommending that three of the accounts be dropped, four be kept open, and that the attorney attempt to collect one of the accounts.

Medical Defense

Letter from the secretary of the Vanderburgh County Medical Society suggesting that patients sign before treatment that they will not bring malpractice suits brought to the attention of the committee. The attorney felt that such action would not be valid. He is to send his opinion in regard to this to the secretary of the Vanderburgh County Medical Society.

There being no further business, the meeting was adjourned.

BUREAU OF PUBLICITY

January 12, 1937.

Present: William N. Wishard, M.D., chairman; F. M. Gastineau, M.D., and T. A. Hendricks, executive secretary.

The release, "Secretaries' Conference," approved for publication in January 28 papers. Release upon Social Hygiene Day, February 3, to be published in the papers of that day, was approved by the committee. The Bureau authorized the preparation of this release by a genito-urinary specialist. This is to be presented to the Bureau at its next regular weekly meeting for final approval.

Requests for speakers:

Jan.12.—Hancock County Federation of Women's Clubs, Greenfield. "Venereal Disease Control." Speaker obtained.

Feb. 1.—Woman's Auxiliary to the Vigo County Medical Society, Terre Haute. Speaker obtained to talk on heart disease.

The following suggestions were made to the Bureau in regard to the pioneer memorials by the chairman of the memorial committee of the Woman's Auxiliary to the Indiana State Medical Association:

1. All graves are to be fenced in. A single railing will be sufficient.

2. Original stone markers are to be left untouched.

3. Stone slabs to cover entire grave, or the erection of a marker at the side of each grave is suggested.

3. A bronze tablet to the pioneers is to be placed at the medical school.

The relatives of each of the pioneers are to be visited and permission obtained to construct the rail fencing and the memorial markers as suggested by the committee. The fear was expressed that if bronze tablets were placed at the graves, these would be stolen.

The following letter was written to the state highway commissioner in regard to memorial tablets being placed on the state highways in the vicinity of the cemeteries where the medical pioneers are buried:

"In accordance with your suggestion as the result of our telephone conversation of yesterday, I am sending you the names of the medical pioneers whom the Indiana State Medical Association and the Woman's Auxiliary to the State Association intend to memorialize:

"(1) Mrs. Janes Todd Crawford, who is buried near Sullivan, Indiana. In 1809 Doctor Ephriam McDowell performed the first operation in the world for ovarian tumor upon her.

"(2) John Lambert Richmond, M.D., who is buried in Spring Vale Cemetery, Lafayette, Indiana. Doctor Richmond, in April, 1827, did the first Cesarean section west of the Alleghany Mountains in what was then the United States of America.

"(3) John Stough Bobbs, M.D., buried at Crown Hill, Indianapolis, who performed the first gallstone operation in the world.

"(4) Mrs. Z. (Mary E.) Burnworth, Doctor J. S. Bobbs' patient, who is buried at Oaklandon, Indiana.

"The State Association intends to mark the grave sites of these pioneers and the suggestion also has been made that markers be placed on the highways in the vicinity of the graves of these medical pioneers. If you or any member of the committee who has charge of the erection of such highway markers desire any further information in regard to these pioneers or the contemplated project of the State Association, we would be very pleased to talk with you."

COUNTY SOCIETY REPORTS

ALLEN COUNTY (FORT WAYNE) MEDICAL SOCIETY met in the Chamber of Commerce Building, Fort Wayne, January nineteenth. A symposium on "Cancer of the Gastro-Intestinal Tract" was presented by Drs. A. N. Ferguson, L. W. Elston, E. M. VanBuskirk, Juan Rodriquez, E. L. Cartwright, and L. T. Rawles. Attendance numbered fifty-two.

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At the February second meeting of the society, Dr. A. C. Furstenberg, of Ann Arbor, Michigan, talked on "Acute Infections of the Mouth, Throat and Cervical Regions." Ninety persons attended the meeting.

* * *

BOONE COUNTY MEDICAL SOCIETY held a meeting at Lebanon, at the Ulen Country Club, February second, for a noon-luncheon meeting. Dr. C. B. Bohner, of Indianapolis, talked on "Allergy."

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CASS COUNTY MEDICAL SOCIETY met January twenty-ninth at Logansport. A motion picture on "Treatment of Pneumonia" was shown and was followed by round-table discussion.

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DAVIESS-MARTIN COUNTY MEDICAL SOCIETY members and nurses of the Daviess county hospital were guests of Dr. and Mrs. E. E. Long, of Shoals, at a turkey dinner, January twenty-sixth.

* * *

DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY met in Muncie, January nineteenth, for a business meeting. Committees were appointed for the year.

Delaware-Blackford County Medical Society officers for 1937 are:

President, Arthur C. Rettig, Muncie.
President-elect, John H. Bowles, Muncie.
Secretary-treasurer, Donald A. Covalt, Muncie.

DUBOIS COUNTY MEDICAL SOCIETY met at the court house in Jasper for a reorganization meeting, January thirteenth. Officers were elected as follows:

President, H. C. Knapp, Huntingburg.
Vice-president, Paul Blessinger, Jasper.
Secretary-treasurer, G. A. Held, Holland.

* * *

ELKHART COUNTY MEDICAL SOCIETY members heard Dr. L. M. Randall, of Rochester, Minnesota, at the February meeting held in the Hotel Elkhart, February fourth.

* * *

FAYETTE-FRANKLIN COUNTY MEDICAL SOCIETY met at the McFarlan Hotel, January eleventh, to hear Dr. W. D. Little, of Indianapolis, talk on "Tumors of the Colon." Attendance numbered fifteen.

At the February eighth meeting of this society, Dr. G. W. Gustafson, of Indianapolis, talked on "Eclampsia."

* * *

FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY members enjoyed a turkey banquet at Veedersburg, January fourteenth.

* * *

GIBSON COUNTY MEDICAL SOCIETY held a meeting in the Emerson Hotel at Princeton, February eighth. Principal speaker was Dr. Herman M. Baker, of Evansville, who discussed "The Present Status of the Problem of Rheumatism and Arthritis."

* * *

GRANT COUNTY MEDICAL SOCIETY members met at the Hotel Spencer in Marion, January twenty-eighth. A dry clinic comprised the program. Cases were presented by Drs. E. M. Trook, Robert Brown, R. W. Lavengood, Harold E. List and P. C. King. Attendance numbered twenty-three.

* * *

HENDRICKS COUNTY MEDICAL SOCIETY held a meeting in Crawley's Hall at Danville, January twenty-first at noon. Mr. Thomas A. Hendricks, of Indianapolis, and Dr. Norman M. Beatty, of Indianapolis, were principal speakers. Attendance numbered sixteen, the best in several months. Discussions were interesting and instructive.

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HOWARD COUNTY MEDICAL SOCIETY met at St. Joseph Hospital, February eighth. Attendance numbered fifteen.

* * *

INDIANAPOLIS (MARION COUNTY) MEDICAL SOCIETY met at the Antlers Hotel, January twenty-sixth. Drs. Murray N. Hadley and Charles Weller presented papers.

Members of the society were guests of the Indiana University School of Medicine, February second, for a program which included presentation of patients in case work and lectures. A motion picture on obstetrics was shown and papers were read by Drs. I. J. Kwitny, E. F. Kiser and Max Bahr.

At the February eighth meeting, cases were reported by Drs. Fred D. Cheney, Glen V. Ryan, E. B. Lamb, T. A. Hanna, J. H. Hawk, Frank W. Teague, William M. Dugan and Earl W. Mericle.

* * *

JASPER-NEWTON COUNTY MEDICAL SOCIETY held a dinner meeting at Kentland, January twenty-eighth, with Dr. G. H. Van Kirk as host. Dr. John Kelly presented a paper on "Prevention and Treatment of Eclampsia." Fifteen physicians and five nurses were present. Moving picture films were shown.

JAY COUNTY MEDICAL SOCIETY met at the Portland Country Club, February fifth. Dr. Bert E. Ellis, of Indianapolis, presented a paper on "Diagnosis and Treatment of Sinus Infection."

* * *

KOSCIUSKO COUNTY MEDICAL SOCIETY members met at the Hotel Hays in Warsaw, February ninth. Dr. W. Bert Siders, of Warsaw, talked on "Pyelitis and Urinary Antisepsis." This was a dinner meeting, with ten in attendance.

LAKE COUNTY MEDICAL SOCIETY held its February meeting at St. Margaret's Hospital, Hammond, February eleventh. Dr. Elmer L. Sevringhaus, of Madison, Wisconsin, talked on "Endocrinal Disturbances."

* * *

MADISON COUNTY MEDICAL SOCIETY members held a dinner meeting, January eighteenth, in Anderson. Speakers were Drs. H. B. Mettel and John W. Ferree, of Indianapolis.

* * *

MONROE COUNTY MEDICAL SOCIETY had a dinner meeting February twenty-fourth at the Graham Hotel in Bloomington. Dr. Willis D. Gatch, of Indianapolis, was the principal speaker, his subject being "The Diagnosis and Treatment of Traumatic Injuries of the Abdominal Viscera."

* * *

MONTGOMERY COUNTY MEDICAL SOCIETY members attended a meeting at the Crawford Cafe, January twenty-first. Dr. George Penston, of Chicago, presented a paper on "Biliary Tract Diseases." Attendance numbered fifteen.

* * *

MUNCIE ACADEMY OF MEDICINE met February ninth at Muncie. Dr. Russell Hayden presented a paper on "Causes, Diagnosis and Treatment of Anemia."

* * *

NORTHEASTERN INDIANA ACAMEDY OF MEDICINE met at Kendallville, January twenty-eighth, with Dr. John H. Warvel, of Indianapolis, as principal speaker. Dr. Warvel talked on "Protamine Insulin."

* * *

PARKE-VERMILLION COUNTY MEDICAL SOCIETY met at Clinton, January twentieth. Dr. I. M. Casebeer was the principal speaker. The physicians joined in a round-table discussion on skin diseases.

* * *

PORTER COUNTY MEDICAL SOCIETY met at Valparaiso, January twenty-sixth, with Dr. F. J. McMichaels, of Gary, as principal speaker. His subject was "Some Case Reports of Hematuria." A moving picture on "Novocain Anesthesia in Obstetrics" was presented.

* * *

PUTNAM COUNTY MEDICAL SOCIETY held its annual dinner meeting in Greencastle, December fifteenth, Dr. Frank Gastineau, of Indianapolis, was the principal speaker. During the meeting, the following officers were elected for 1937:

President, Clyde Gray, Cloverdale.
Secretary, Gilbert D. Rhea, Greencastle.

* * *

RANDOLPH COUNTY MEDICAL SOCIETY met in the Randolph Hotel at Winchester, December fourteenth, for the annual banquet and election of officers.

* * *

Officers for the Randolph County Medical Society were elected as follows:

President, J. M. Wallace, Lynn.
Vice-president, J. Jordan, Lynn.
Secretary-treasurer, Lowell Painter, Winchester.

RANDOLPH COUNTY MEDICAL SOCIETY held its February meeting at the Randolph county hospital, Winchester, February eighth.

* * *

ST. JOSEPH COUNTY MEDICAL SOCIETY officers for 1937 are:

President, J. W. Hilbert, South Bend.
Vice-president, W. L. Spalding, Mishawaka.
Secretary-treasurer, J. V. Cassady, South Bend.

* * *

ST. JOSEPH COUNTY MEDICAL SOCIETY held a meeting at the Jefferson Plaza, South Bend, January twenty-sixth. Dr. David A. Bickel talked on "Prolapse of the Uterus—Etiology and Symptoms." Thirty-six members and four guests attended. At this meeting, the physicians of the St. Joseph County Medical Society offered their services to the flood districts if needed.

At the February tenth meeting, Dr. Louis Faltin, of South Bend, presented a paper on "Lobar Pneumonia—Serum Therapy." Attendance numbered fifty-nine.

* * *

TIPPECANOE COUNTY MEDICAL SOCIETY held a meeting at the State Soldiers' Home, Lafayette, January twelfth. The speaker was Dr. W. W. Washburn, of Lafayette. His subject was "Cystitis." Members were guests of the commandant and physicians at the Soldiers' Home.

* * *

TIPPECANOE COUNTY MEDICAL SOCIETY met in the Memorial Union Building, Lafayette, February ninth, for a dinner meeting. Dr. B. J. Larkin, of Indianapolis, discussed "The Eye as a Help in Systemic Disease" and a motion picture on "Typing and Treatment of Pneumonia" was presented by the Lederle Laboratories. Attendance numbered approximately forty.

* * *

VANDERBURGH COUNTY MEDICAL SOCIETY members heard papers prepared by Drs. Edgar Weber, Herbert Dickman and Isidor Raphael on recent advances in medicine, surgery, and pediatrics, at the meeting held in Evansville, November tenth. Dr. Herman Baker, president-elect of the Indiana State Medical Association, was a speaker at the meeting.

* * *

VIGO COUNTY MEDICAL SOCIETY held its ninetieth annual meeting at the Elks' Club in Terre Haute, January twelfth. Dr. A. M. Mitchell, the secretary of the society, can find no records of the original meeting held in 1846, but history of medical activity in Indiana establishes that date as the time of the first meeting. Meetings were held occasionally after that, but during the civil war, all meetings were discontinued. In 1874 the society took on new life, and written minutes of every meeting since that time are available.

* * *

WABASH COUNTY MEDICAL SOCIETY met at the Indiana Hotel, Wabash, February third. Dr. H. A. Miller, of Marion, discussed "Burns." Eighteen members and twelve guests attended.

* * *

WAYNE-UNION COUNTY MEDICAL SOCIETY held a meeting at the Richmond-Leland Hotel in Richmond, February eleventh, to hear Dr. Bernard Rosenak, of Indianapolis, discuss "Medical Treatment of Gall-Bladder Disease." Attendance numbered twenty-four.

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EAR, NOSE & THROAT — Informal Course; Personal Courses; Intensive Two Weeks Course starting April 5, 1937.

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WELLS COUNTY MEDICAL SOCIETY held a meeting in Bluffton, January twelfth, for election of officers for 1937. They are:

President, George B. Morris, Bluffton.
Vice-president, H. Brooks Smith, Bluffton.
Secretary, William A. Gitlin, Bluffton.

* * *

WHITLEY COUNTY MEDICAL SOCIETY held a meeting in Columbia City, January twelfth, with Dr. B. S. Cornell, of Fort Wayne, as principal speaker. Dr. Cornell's subject was "Heart Disease."

At the February eighth meeting, Dr. L. W. Elston, of Fort Wayne, talked on "Cesarean Section."

* * *

SULLIVAN COUNTY MEDICAL SOCIETY members held a meeting at the Mary Sherman Hospital in Sullivan, February third. Dr. J. Rudolph Yung, of Terre Haute, was the principal speaker, his subject being "Thyroidectomy." Moving picture films were shown on "Subtotal Thyroidectomy," "Thyroidectomy in Detail," and "Subtotal Hemithyroidectomy."

BOOKS

BOOKS RECEIVED

THE MANAGEMENT OF OBSTETRIC DIFFICULTIES. By Paul Titus, M.D., obstetrician and gynecologist to the St. Margaret Memorial Hospital, Pittsburgh. 879 pages with 314 illustrations, including 4 color plates. Cloth. Price, $8.50. The C. V. Mosby Company, St. Louis, 1937.

* * *

PHYSICAL THERAPEUTIC METHODS IN OTOLARYNGOLOGY. By Abraham R. Hollender, M.D., associate in Laryngology, Rhinology, and Otology, University of Illinois College of Medicine. 442 pages with 189 illustrations. Cloth. Price, $5.00. The C. V. Mosby Company, St. Louis, 1937.

* * *

MEDICAL MORALS AND MANNERS. By Hubert Ashley Royster, M.D. 333 pages. Cloth. Price, $2.50. The University of North Carolina Press, Chapel Hill, 1937.

* * *

MODERN TREATMENT AND FORMULARY. By Edward A. Mullen, P.D., M.D., F.A.C.S., Assistant professor pharmacology and physiology, Philadelphia College of Pharmacy and Science. Foreword by Horatio C. Wood, Jr. 707 pages. Flexible leather. F. A. Davis Company, Philadelphia, 1936.

* * *

APPLIED DIETITICS. By Sanford Blum, A.B., M.D., head of department of pediatrics and director of research laboratory, San Francisco Polyclinic and Post Graduate School. 408 pages. Cloth. F. A. Davis Company, Philadelphia, 1936.

* * *

THE PHYSIOLOGICAL BASIS OF MEDICAL PRACTICE. A University of Toronto Text in Applied Physiology. By Charles H. Best, M.D., D.Sc., professor and head of the Department of Physiology, Associate Director of the Connaught Laboratories, Research Associate in the Banting-Best Department of Medical Research, University of Toronto; and Norman B. Taylor, M.D., professor of physiology, University of Toronto. 1,684 pages, illustrated. Cloth. Price, $10.00. William Wood and Company, Baltimore, 1937.

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★ *Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245*
Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154
N. Y. State Jour. Med., June 1935, Vol. 35, No. 11
Arch. Otolaryngology, Mar. 1936, Vol. 23, No. 3, 306-309

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N. Y. State Jour. Med. 1935, 35—No. 11, 590; Laryngoscope 1935 XLV, 149-154. Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245. ☐

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ABSTRACT

INSULIN SHOCK THERAPY IN SCHIZOPHRENIA

JULIUS STEINFELD, Peoria, Ill. (*Journal A.M.A.*, Jan. 9, 1937), cites three cases of schizophrenia which differ not only in the type of their reactions but also in the magnitude and type of their response to any given amount of insulin. The application of this treatment emperatively requires the constant presence of the physician and of efficient nurses, because of the hazards involved. From his limited experience, insulin shock therapy may show many serious deviations from the typical reactions. In patient 1 there were no typical "wet shocks," and she never fell into deep somnolence or coma. At the point at which increasing somnolence or coma might be expected, this patient went into either severe epileptiform convulsions or a circulatory collapse so profound that immediate intervention was necessary. Blood sugar determinations proved to be of little value in predicting the course of the reaction; much more important was careful observation of the pulse and blood pressure. During and after the treatment it seemed to be possible to influence the patients in a psychotherapeutic way. In the author's opinion the type of reaction in patients 2 and 3 ("wet shock") is not as dangerous as that in the first case. Patient 1 first developed psychotic symptoms eight years before; this initial attack lasted two years. It was possible to bring this patient, refractory to all other forms of therapy, out of her psychosis in seven weeks and send her home. This period is to be compared to her first illness of two years' duration. The second patient is making rapid progress. Finally, it is suggested that to decide definitely on the value of this form of therapy it might be well to establish some central office where all the data could be conveniently assembled and compared. Since most institutions are prepared to carry out only a few of these time and energy consuming treatments at any one time and since there is such a wide diversity of opinion as to the point at which a patient may be considered to have gained a "remission," such uniform statistics would be of incomparable value.

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WATER METABOLISM*

FREDERICK A. COLLER, M.D.

Ann Arbor, Michigan



Dr. F. A. Coller

Approximately 70 per cent of the body weight is composed of water. For years physicians and surgeons have recognized the great importance of maintaining this water in the body at a normal figure. The ordinary healthy individual eats when he is hungry, drinks when he is thirsty, and thus maintains his water balance perfectly. In certain diseases, however, either because of their nature or due to operations, particularly after procedures on the gastrointestinal tract, the patient cannot respond to hunger and thirst, and fluid must be given parenterally. In these situations the physician or surgeon governs the amount and kind of fluid supplied.

For many years I was impressed with my inability to gauge accurately the quantity of fluid needed. Internes would ask me and I would look wise and say, "One or two liters." I was conscious of the fact that I had no quantitative data on which to base my reply. Therefore, about five years ago we began to study this subject with the idea of getting some factor which would enable us to give fluid with a fair degree of accuracy. I shall now go over briefly four or five of these studies.

After leaving the gastrointestinal tract, water is distributed throughout three compartments in the body: the vascular system, the interstitial spaces, and the intracellular fluid. There is a constant interchange of fluid between these three compartments. Water, which can be made available in an emergency, however, is situated chiefly in the interstitial spaces of muscles and subcutaneous tissues. The normal water exchange of the body results in a balance between fluid that is taken in and fluid that is sent out. I shall mention briefly some physiological facts in the water balance of the normal individual.

Water available to the body consists, first, of fluids drunk. The amount we drink will vary with the kind of work we are doing; one or two liters a day is about what the ordinary person takes. The second source of available water is from food, composed of its actual water content and the water resulting from oxidation. The water content of solid food in the average meal varies from about 60 to 80 per cent of the total weight of the food, and when the water of oxidation is added to this, one may say that in general about 90 per cent of the total weight of food eaten is available water. Thus the ordinary hospital diet furnishes about 1,500 c.c. daily and the so-called soft diet about 500 c.c. A patient unable to eat and having to burn his body tissue for food rarely obtains more than 400 c.c. of water daily from this source.

Water is excreted through the urine, in the stool, and by vaporization from the skin and lungs. I shall reiterate the fact that the kidneys function with water that is left over after other needs have been cared for; thus the amount of urine excreted varies with the fluid intake and with losses through other channels. The excretion of water in the stool is usually not important, rarely amounting to more than 200 c.c. A patient with severe diarrhea, however, may lose an enormous quantity of fluid and may die of dehydration. Pediatricians have called our attention to this very important point as it concerns infectious diarrhea in infants.

The loss of water vapor from the skin and lungs was a subject about which I had very vague ideas when these studies were started. The water is lost from the surface of the body as part of the heat regulatory mechanism. In comfortable surroundings about 24 per cent of the body heat is dissipated from the lungs and skin surface by means of this vaporizing process, the adult individual losing from 800 to 1,500 c.c. of water a

* From the Department of Surgery, University of Michigan. Presented before the 87th annual session of the Indiana State Medical Association, South Bend, October 7, 1936.

day. If we move to higher environmental temperatures and humidities, a much larger share of the body heat is removed by vaporization and consequently a larger amount of water is required. It is important to note that this insensible loss of water is not reduced when the general supply of water is low. It is the kidneys, forced to work with the small amount of water left over, which then suffer.

Our first study was made on patients during operation and in immediate four-hour postoperative period. We were trying to find out how much fluid was lost, the main route by which it left the body, and whether we could do anything to prevent the loss. It seemed ridiculous to cause a patient to lose fluid, then turn around and put it in with a needle. The method of study involved careful weighing of the patient and of all fluid losses. The essential finding was that, during operation and the recovery period, the average patient lost about one liter of fluid through blood, vomiting, urine and vaporization. Of this total about 70 per cent was lost through vaporization. The discontinuance of the old-fashioned "ether bed" in which the patient was surrounded by hot water bottles and covered with numerous blankets was found to help reduce some of this loss. When patients were placed in bed with the same amount of covering they had used previous to operation, about 300 c.c. of water were saved to the patient, he was made considerably more comfortable, and the kidneys had more fluid with which to excrete waste materials.

We continued these studies to determine the water exchange of surgical patients over a period of several days and to include patients with a variety of lesions. Particular attention was paid to the quantity of water vaporized, since this loss may be relatively large and usually receives little attention. It was found that patients with simple surgical conditions who had comparatively short operations vaporized from 1,000 to 1,500 c.c. of water daily, approximately the amount which would be lost by normal individuals at light activity. Moderate dehydration occurred on the day of operation, which was usually compensated for by the ingestion of a larger amount of fluid than ordinary on the day following operation.

The effect of infection with its associated fever upon the water loss was next studied. Data from several patients with fever from 101 and 103 degrees Fahrenheit daily showed variations in the quantity of water vaporized of from 1,500 to about 2,000 c.c. This increase was due to the greater amount of heat to be dissipated.

Patients with hyperthyroidism likewise showed an elevated vaporization loss, the average of a number of such cases studied being close to 2,000 c.c. a day. This is again due to the greater production of heat because of the increased metabolic rate and not due to any obscure process associated with the endocrine disturbance.

One would be safe, then, in considering that the surgical patient with fever, infection, or hyperthyroidism loses about 2,000 c.c. of water daily from the skin and lungs, and in allowing for this when estimating his fluid requirements, water for the urine is the other normal need which must be taken care of. We have been using the figure of 1,500 c.c. daily for the urine since Lashmet and Newburgh have shown that even markedly damaged kidneys can excrete the usual amount of waste materials if given that quantity of water daily with which to work. If a minimum output of 1,500 c.c. of urine daily is provided for in sick surgical patients, an adequate renal function is practically guaranteed. A total intake, therefore, of 3,500 c.c. will care for the ordinary surgical patient who is not losing fluid through abnormal routes.

Abnormal losses of fluid such as through vomiting, diarrhea, drainage from fistulae, or exudations from large ulcers, are frequently of huge volume, and must be carefully measured, recorded and replaced. Such losses, continued over a number of days, and inadequately restored, will oftentimes lead to dehydration in spite of what appears to be a generous intake of fluid. A negative water balance should always be suspected and eliminated whenever dealing with cases of oliguria or anuria of no obvious cause.

Our next study was concerned with the problem of dehydration. We are all familiar with the young man who has appendicitis and has been vomiting for two or three days, or the one who has intestinal obstruction and has been losing fluid because of reverse peristalsis. Such a patient has a dry skin, a parched tongue, and sunken eyes, all signs of a serious dehydration. Our study was designed to find out how much fluid a patient loses in order to reach such a state of dehydration, since this knowledge, conversely, would enable the accurate replacement of the fluid. There were two ways to get at this problem, the most practical of which was to dehydrate a normal individual. We studied a normal healthy medical student who went about his usual work but did not drink any water for four days and was on a diet that contained about 500 c.c. of water. At the end of that time he presented a typical picture of dehydration, with scanty urine of a specific gravity of 1.038, fever, an elevated blood nonprotein nitrogen level, and concentration of blood cells. When these signs developed he had lost an amount of fluid equal to 6 per cent of his total weight. On the following day when he was allowed to drink all he wanted, six liters, his urine volume did not increase. Probably the body cells and interstitial spaces absorbed water. The following day after being allowed fluid, the urine dropped to normal concentration. A second subject was likewise studied and again showed evidence of serious dehydration after a loss of fluid equal to about 6 per cent of his body weight.

We have used this 6 per cent figure on a number of dehydrated patients recently in estimating their fluid requirements and in each case it gave us a fairly exact idea as to the quantity of fluid necessary to overcome the dehydration. In employing this figure, consideration of the other previously mentioned needs for fluid must not be overlooked but rather added to the amount required by the tissues. One cannot set a definite quantity of fluid to be given arbitrarily to all dehydrated patients since the demand of each patient will vary with his weight, degree of dehydration and other losses. Each case should be considered on its own merits.

What kind of fluid will you give to replace water loss? The ordinary fluids that are employed for parenteral use in most of our hospitals are physiological saline solution, Ringer's solution and 5 per cent dextrose in distilled water. All of these have a place. In general the patient should be given what he needs. Salt solutions should not be used routinely but only to replace lost electrolytes. Where there has been vomiting, marked diarrhea, biliary or enterostomy drainage, the quantity of fluid lost should be replaced by an equal amount of physiological sodium chloride or Ringer's solution. Whenever there is the possibility of a serious depletion of the body's store of sodium chloride, blood chemistry studies should be carried out and saline solution given until the blood is restored to normal. In most instances the patient needs only water, which can best be given as 5 per cent dextrose in distilled water. The dextrose is rapidly oxidized, which provides energy and prevents ketosis, while the water is left available for all purposes. The blood chloride level will not diminish appreciably unless there is abnormal loss.

We have recently been studying the relationship of the intravenous use of saline solutions and the development of postoperative edema. Among the various causes of postoperative edema are undernutrition, profuse serous drainage, hemorrhage, and the excessive administration of fluid and salt. It was our feeling that the excessive use of salt solution was probably the exciting factor in most cases of edema following operation. We, therefore, gave a group of postoperative patients needing parenteral fluids a fair amount of dextrose in saline solution. Despite the insufficient caloric intake, all the sick patients retained water and gained weight when they should have been losing weight. When the intake was changed to dextrose in distilled water or to fluids by mouth, the retention of water promptly ceased. We feel, therefore, where there is no special need for sodium chloride, the fluid of choice for parenteral administration is 5 per cent dextrose in distilled water.

There seems to be little use in giving dextrose solutions of higher concentration than 5 per cent since the dextrose cannot be burned rapidly enough to be entirely utilized; exception to this is for the purpose of withdrawing water from the tissues, as when 50 per cent dextrose is given to reduce increased intracranial pressure.

SUMMARY

In summary, to maintain the water balance of a patient who cannot use his gastrointestinal tract, allow two liters for the loss through vaporization, one and one-half liters for the urine and add to this a quantity equal to whatever amount he is vomiting or otherwise losing. Secondly, if a patient comes to you dehydrated as from vomiting, give him fluid equal to 6 per cent of his body weight and then carry on as with a patient whose water balance you are maintaining. Loss from the gastrointestinal tract should be replaced by a physiological saline solution and the remainder of the fluid given as 5 per cent dextrose in distilled water.

ABSTRACT

THE ADMINISTRATION OF SYPHILIS CONTROL PROGRAM

R. A. Vonderlehr, Washington, D. C. (*Journal A.M.A.*, September 5, 1936), points out that the provisions of the Social Security Act enable health departments throughout the country to strengthen all phases of public health work. These provisions should at the same time permit of a sound development of measures directed against syphilis. Syphilis is at present one of the most prevalent of diseases. Its cause, the means of preventing it, and the economic loss and suffering due to it are well known. As the prevalence of other common communicable diseases decreases, additional funds should be made available and further attention given to this most serious of public health problems. In the general administration of syphilis control work, two factors are of importance: (1) the selection of a well qualified venereal disease control officer with a clear-cut understanding of his duties and (2) the relationship of the venereal disease control officer to other activities both within and without the jurisdiction of the health department. The duties of a properly qualified venereal disease control officer may be classified as administrative, advisory and cooperative. The successful administrator of venereal disease control work must have the ability to discriminate between poor and worth while projects. This is necessary because the problem is of such magnitude that many methods of attempting to solve the same problem are frequently offered. Limitation of funds and personnel makes it essential that the most direct and efficient method be utilized to accomplish a given end. Astute judgment is required not only in the selection of projects but also in choosing personnel. The venereal disease officer should always act impartially and with strict justice. He should deal with personal behavior only when necessary to prevent the spread of syphilis. After stressing that the venereal disease officer should obtain the cooperation of the medical profession, the author discusses the relationship to other health activities showing that the syphilis control program is closely related to activities of the health department other than the communicable disease control section. For instance, the section on maternal and child care has frequent need for the assistance and cooperation of a specialist in syphilis control. The aid of voluntary organizations interested in the improvement of social and economic conditions in the area is also of value. Due regard for the importance of the syphilis problem must be given in financing the program.

ANESTHESIA FOR THYROID SURGERY*

L. F. SISE, M.D.
Boston



Dr. L. F. Sise

In considering anesthesia for thyroid surgery, the subject may well be divided into two parts: (1) choice of anesthetic, and (2) management of the anesthesia.

CHOICE OF ANESTHETIC

Here, as elsewhere, the most important consideration is the ultimate safety of the patient. The anesthetic should, therefore, be as non-toxic as possible consistent with an efficiency which will enable the operation to be well performed and with comfort to the patient. On the basis of non-toxicity and efficiency, it takes little time to discard from consideration all the various anesthetic agents with the exception of regional anesthesia and one of the various gases. Ether is upsetting, and its powerful effect is unnecessary. The choice between regional anesthesia and one of the gases will usually rest largely with the characteristics and training of the surgeon and anesthetist. At the Lahey Clinic, while we started originally with local anesthesia and have done many cases successfully with it, we have subsequently turned to the gases and have used successively nitrous oxide, ethylene and cyclopropane.

Nothing can be said against local or regional anesthesia on the score of toxicity. They are not, however, entirely efficient, and may be in themselves a source of some strain to the patient, particularly if deep cervical plexus block is employed; however, if this block is not employed, the anesthesia is likely to lack considerably in efficiency. Many of these patients suffer from thyroid toxicity and are highly nervous, and are thus very poor subjects for injection and operation in the conscious states. Our Medical Department some time ago followed through operation a number of thyrocardiac cases in congestive failure, both under local anesthesia and under general anesthesia with one of the gases, and was convinced that the increase in venous congestion was greater under local than under general anesthesia.

Local anesthesia also restricts, at least to some extent, the perfect freedom which the surgeon has under general anesthesia. He cannot employ the wide dissection and the open clear cut exposure that he can under general anesthesia. This is important because of the importance and concealed position of certain structures such as the parathyroids and the recurrent laryngeal nerve. The distressing results of undue removal of the one or injury to the other make anything which will reduce the incidence of these accidents well worth while. A general anesthetic seems to us to be one factor which strongly facilitates operative procedures and methods which tend to the avoidance of these accidents. While the toxicity of the gases is slightly greater than that of local anesthesia or regional anesthesia, it is still so low as to be practically negligible. They appear to us to offer the most suitable combination of very low toxicity and ample efficiency of any of the anesthetic agents. While this is true of nitrous oxide to a considerable degree, it is more true of ethylene and particularly true of cyclopropane. We feel that the low oxygen allowance with nitrous oxide with its inevitable anoxemia is not good, especially for thyrotoxic patients whose oxygen needs are large. Per contra, the superabundance of oxygen usable with cyclopropane is very suitable for these cases, and is valuable where heart complications are present.

A disadvantage of cyclopropane is its explosibility in concentrations within the anesthetic range. There are effective methods of guarding against its ignition except where diathermy is being used. Where diathermy is being used, no method for the control of these currents seems sufficiently sure to make the use of explosive anesthetics safe. Where diathermy is being used it is better, therefore, to use some other anesthetic agent than cyclopropane.

Some premedication is of value in all cases, but it should be varied decidedly to suit the needs of the individual case. We have not used avertin as a preliminary, probably largely because it is time consuming in a busy clinic, but also because in the most toxic cases where it would otherwise be most suitable, there is a probability that the function of the liver may be impaired, and also because our experience in the occasional case in which we have used it has not been sufficiently favorable to make it seem worth while for general use. Our most usual premedication has consisted of three grains of nembutal given by mouth 1½ hours before operation, and ⅛ grain of morphine sulphate and 1/200 or 1/150 grains of scopolamine hydrobromate given subcutaneously 45 minutes before operation. There are probably other combinations which would be equally satisfactory. Premedication should be varied up or down from the given dosage according to the patient's age, vigor, weight, nervous condition and so forth, just as would be done for surgery in any other region.

There are two conditions affecting premedication which are peculiar to thyroid surgery, both resulting from thyroid toxicity, and both to be dealt with more fully later in consideration of management of the anesthesia.

The first of these is activated hyperthyroidism, appearing typically in the young and vigorous after short duration of the disease. These patients should have heavy preliminary medication. Here the dosage may be run in a few instances as high as pentobarbital sodium 4½ grains, morphine sul-

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phate ¼ grain and scopolamine hydrobromate 1/100 grain. The second condition is apathetic hyperthyroidism appearing typically in the elderly and weak after the disease has run a long course and resulted in considerable loss of weight. Here more than minimal medication may be quite harmful. An eighth or even a tenth of a grain of morphine is here usually ample.

METHOD

Where a gas anesthetic is used, the method of carbon dioxide absorption popularized by Waters is the preferable one to use. Where cyclopropane is used it appears to be the only practicable one to employ. It is quite desirable from the standpoint of economy but also has other features which recommend it in this branch of surgery.

This method reduces the carbon dioxide concentration in inhaled gases to a lower point than is practicable by the other methods. This greater efficiency in removing carbon dioxide is especially suitable with the activated type of hyperthyroidism since these patients form carbon dioxide in more than normal volume. Two desirable features result from this lowered concentration. The breathing is quieter and thus produces less motion in the operative field and less interference with the work of the surgeon. There is less general stimulation of these already overstimulated, activated cases. While no direct observations for this purpose have been made on these particular patients, it seems possible that the blood pressure does not run so high as where the breathed carbon dioxide is higher. Certainly there is less stimulation to respiration. It has seemed to us clinically that there was less vomiting in the immediate postoperative period.

One more favorable feature of this method remains. Where inflammable gases are being used, their close confinement within the closed system distinctly lowers the fire hazard.

MANAGEMENT OF ANESTHESIA

While anesthesia for thyroid surgery is broadly based on the same fundamental principles as for surgery elsewhere, in matters of detail there are several points which must be given special consideration:

1. The anesthetist's opportunity for free action is somewhat restricted by his close proximity to the field of the surgeon. This makes it advisable to do any necessary manipulations like placing of breathing tubes early in the course of the anesthesia and not to wait until the surgeon is perhaps at some critical point of the operation. It is, therefore, well, no matter how freely the patient breathes without airways, always to place them in position as soon as reflexes are sufficiently obtunded. A strap or harness to hold the mask in position is a help. A strap passed under the chin to hold the jaw up instead of by means of the hands affords a little more room to the surgical field and is, therefore, sometimes a help especially in short necked individuals.

Should intubation become necessary in the course of the operation, as occasionally happens, it will be necessary for the surgeon to stop his work until the tube is in place. The drapes, however, may be pushed forward to give sufficient room so that intubation may be readily done, when the drapes may be pulled back, and the operation may proceed. The possibility of some interference with operation makes it desirable to do intubation before operation on somewhat less provocation than would otherwise be the case.

2. The possibilities of obstruction of respiration are somewhat greater than usual in this field of surgery. Ordinary manipulation of the trachea in the course of operation, with the head extended, if the trachea is small and compressible, may cause marked degrees of obstruction. Thyroid tumors may press on the trachea. When the tumor is located within the thorax it is especially likely to cause obstruction during extraction. There may be abductor paralysis of one or both cords from a previous operation, or paralysis of one or even conceivably of both cords might occur during operation.

When it is suspected that obstruction may occur, premedication should be light. Under the relaxation of narcosis with the patient level, obstruction may take place and a vicious cycle of narcosis and anoxemia be started. If the patient is not carefully watched severe and conceivably even fatal obstruction may result while the patient is waiting for operation, even though no considerable degree of obstruction was evidenced beforehand.

During anesthesia anoxemia and labored breathing of obstruction are highly undesirable features in surgery of any region; but they are especially undesirable here because of the high oxygen requirements of many of these patients, because of the increased tendency to bleeding caused by increased venous congestion, and because of the motion of breathing.

For all of these reasons, especial care should be taken in evaluating the patient before operation to consider what are the possibilities of any considerable degree of obstruction occurring during operation. If there is any doubt in the matter it should be resolved in favor of using the intratracheal method of anesthesia and of having the tube in place before the operation is started. The smooth, easy, quiet, well-controlled course of anesthesia by the intratracheal method is so much easier on the patient than the labored anoxemic course without it, always with the possibility of the obstruction going beyond control and resulting in real asphyxia, that there should be no hesitation in using the intratracheal method. While a slight extra strain is placed on the patient by the intubation, yet this strain is so slight in comparison with what may happen without it that it

is well worth while. No one who has watched a case of severe obstruction without an intratracheal tube in place, and who has compared this with one in which such a tube has been used, can doubt this for a moment.

In cases of obstruction the use of helium is frequently of advantage to thin the mixture and thus to make it more readily breathed by the patient. This does not mean, however, that it is a substitute for a clear airway. A clear airway still remains the prime necessity of inhalation anesthesia. Every attempt should be made to obtain it by mechanical means. Where after best attempts to maintain a clear airway some obstruction still remains, and where this obstruction is so slight and the procedure is so short that intratracheal anesthesia does not seem worth while, the use of helium may be of considerable benefit in easing the respiration. The most striking results with helium, however, have occurred in cases of severe obstruction. Where cases have come to the operating room with severe obstruction from tumor or cord paralysis, the use of helium as an aid to starting general anesthesia has been in some cases almost spectacular. If these patients are given a mixture which approximates 80% helium and 20% oxygen, their breathing will be so greatly relieved that cyclopropane can be added to this mixture in sufficient amounts to produce enough anesthesia for intubation. Under these circumstances we have found helium of great assistance in these very trying cases.

In using helium with anesthetic mixtures, it is necessary to remember two points concerning it. In the first place it cannot well be used with nitrous oxide or ethylene. These two gases require 80-90% of the anesthetic mixture so that there is barely room enough left for the necessary oxygen, and no room is left after this for the employment of helium. In the second place, where the carbon dioxide absorption technique is being used as with cyclopropane, it is necessary to employ a considerable flow of helium and the gas in order to wash away from the closed system the heavy gas nitrogen which is exhaled from the patient's body. If this is not done, the full benefit of helium will not be realized.

3. *Toxicity.* The various types and grades of thyroid toxicity are of concern to the anesthetist. With the activated type the stimulation of mounting carbon dioxide concentrations should be avoided. These patients use up the soda lime rapidly. Care should be taken to see that it is sufficiently fresh before starting the anesthesia. Their minute volume of respiration is comparatively large, and they require an airway of good caliber to accommodate it.

The cooperative anesthetist may be of considerable help to the surgeon operating on thyrotoxic cases in determining whether a one or a multistage procedure should be performed. Before operation he should acquaint himself well with the patient's history and characteristics. Some of the points which should put him on his guard and indicate caution are duration of the disease (over 1 year), age of patient (over 40), marked loss of weight (20 pounds or more), disability, and an emotional, unstable, poorly controlled mentality. With these facts in hand, a tentative prospect for the patient may be visioned, and this should be kept in mind during the anesthesia.

This prospect may be strengthened to a certainty or it may be entirely changed by the course during anesthesia.

It is very important to distinguish between two types of hyperthyroidism, the activated type and the apathetic type, already mentioned in speaking of preliminary medication. The activated type will usually give fairly clear cut signs during anesthesia of approaching trouble. Of these the most reliable is the pulse rate. These cases all tend to run a rapid pulse rate, so that a pulse rate in the vicinity of 120-130 should not cause undue alarm. However, if the pulse rate tends to rise throughout the operation, particularly if it reaches the vicinity of 150 or over, caution should be employed. The same general comment applies to the pulse pressure and the blood pressure. These both tend to run high. Of the two the pulse pressure is rather the better guide. A pulse pressure of over 100 is apt to be a signal for caution. In cases which will do badly after operation, both the blood pressure and the pulse pressure tend to fall towards the close of operation. Other signs which call for caution are unduly stimulated respiration and particularly the consumption of an unusual amount of oxygen.

Unlike the activated type, the apathetic type of hyperthyroidism gives no sign of impending trouble during operation. The anesthesia is usually easy and smooth, and the course is colorless and apparently normal, even though a fatal termination may result in a few days. It is, therefore, extremely important that this type of patient be recognized before operation, that the amount of surgery to be performed be definitely decided upon at that time and that no reliance be placed upon an apparently favorable course during anesthesia.

4. There may be a strong tendency to cough and to the production of mucus because of manipulation of the trachea during operation. It is necessary at these times to put the patient fairly deep in order to control these reflexes. At other times only a light anesthesia is necessary.

5. A hole may be cut in the trachea allowing the escape of gas from the closed system and the inhalation of blood from the operative wound. This accident is often signalled by an exclamation from the surgeon, and is followed by the escape of the anesthetic gases and the collapse of the breathing bag. The surgeon will close the hole with his finger, allowing refilling of the breathing bag. A large flow of gas should now be started so that if at any time the finger is removed from the hole

and it is thus opened again, the rapid outflow of gas through the hole will prevent inhalation of blood from the operative wound.

6. Heart complications are somewhat frequent among these patients. Thyroid toxemia induces a rapid heart rate, and this rapid rate constitutes a load on the heart. Most hearts carry this load safely, and in most thyroid patients it is not damaged by the disease, but a certain portion take on auricular fibrillation. The factors which tend to produce auricular fibrillation in these cases are advancing age and previous cardiac damage.

A few of the cases of auricular fibrillation go on to definite heart failure as evidenced by the inability of the heart to empty the veins. Before operation many of these can be relieved of their failure by appropriate medical treatment. Some, however, cannot be relieved while carrying the burden of toxicity and must be operated on in definite heart failure.

These patients with heart failure due to thyroid toxemia constitute a comparatively small but a very definite and important group. Many of them are among the very worst operative and anesthetic risks. On the average they are about 50 years old, have endured for a long period of time the strain of thyroid toxemia, have suffered a large loss of weight, and have experienced a considerable period of total disability.

The risk of anesthesia in thyroid cases with heart complications may be that of sudden death on the operating table or of a more gradual death postoperatively from heart failure. Curiously enough, death in either manner is quite rare. We have had three deaths on the table in over 15,000 thyroid operations, and all three were in patients who were known before operation to be extremely hazardous risks. The change wrought in these thyro-cardiac patients by operation, from complete invalidism to comparative well being, is among the most gratifying which we encounter. It appears thoroughly to justify the risk entailed. The risk is there, however, and it is very evident to the anesthetist. It behooves him to administer his anesthetic with the greatest possible care, and to keep his attention focused upon it unflaggingly throughout the entire procedure.

7. Many of these patients have exophthalmos, sometimes of extreme degree. If the cornea of such an eye is injured even slightly, the effect on the eye may be disastrous, leading sometimes even eventually to blindness. It is imperative that the anesthetist pay the closest attention to protection of the eyes during anesthesia. Where it is possible completely to close the eyes he should see that this is done, at the same time keeping in mind the fact that it is difficult in the relative position of the patient and anesthetist to make sure that the eye is indeed entirely closed. It is not well to cover the eye with cloth, gauze or other rough material since if the eye does come open under this, it cannot be perceived by the anesthetist and injury may take place before he is aware of it. If the eye cannot be closed it is better the fill the space with white vaseline or a bland ointment or to cover the eye with gutta percha.

SUMMARY

Cyclopropane appears to us to offer the best anesthesia for thyroid surgery since it combines better than any other the two necessary factors, efficiency and low toxicity. It is also possible to use with it abundant oxygen, and it lends itself better than any other gas to the carbon dioxide absorption method of anesthesia and to the use with it of helium. A comparatively light plane of anesthesia is best suited to these cases except during certain periods when considerable depth may be necessary to control reflexes. Certain special features which have been enumerated should be kept constantly in mind.

DISCUSSION

Goethe Link, M.D., (Indianapolis): I shall discuss this paper, of course, from the standpoint of the surgeon and wish to cover a little broader field than was covered by Dr. Sise, including the preparation of the patient, the anesthetic agent, its administration, the anesthetist, and the postoperative period. Above all, we wish to remember that the old style of "pick-up" anesthetic will not do for thyroid surgery. It is a too highly specialized type of surgery. In our thyroid work of over twenty-five years, our sequence has been very much like that outlined by Dr. Sise in the method of anesthesia for thyroid surgery. First we began with local, then ether, nitrous oxide-oxygen, nitrous oxide and barbiturates as a basal, ethylene and barbiturates, and now cyclopropane. Ether we dismiss as having been superseded by gas. We dismiss local as being preferred by some but used by us only on special indication. In most cases where we used to think local was necessary, a general we find better as now given.

In preparing the patient we attempt to decide upon the amount and character of the basal necessary. If nitrous oxide is to be used, we prefer heavy basal, less with ethylene, and with cyclopropane still less. We think avertin increases the pulse rate in some cases, certainly not a desideratum in thyroid surgery. In patients past 50 years of age we prefer not to give very large doses of a barbiturate. In a few cases that are very toxic, it is difficult to decide whether or not they can survive an operation. If, under complete anesthesia, the pulse slows, we proceed to do thyroidectomy. If it gets faster under the anesthetic, we may do a ligation and send the patient home. The effect of cyclopropane in many cases is to slow the pulse. We consider it the best agent in goiter surgery to date.

The administration of the anesthetic we shall not discuss, except to remark that it is a marvelous aid to goiter surgery to have the services of a

skilful anesthetist with modern apparatus and drugs. The patient's respiratory tract is made into a closed laboratory into which a certain percentage of gas is introduced, a certain percentage of oxygen; a certain amount of CO^2 is removed or introduced. Helium may be added or a little ether, all to produce perfect steady anesthesia with quiet respiration, red blood and every condition most favorable for the surgeon's work. This in addition may need to be done through an intra-tracheal tube.

Thyroid surgery requires individualization; no two cases are alike. The skilful anesthetist is ready at once to meet the varying demands of the individual for this exacting chemical and technical problem. Speaking for those who do thyroid surgery, I may say that we value the highly scientific work done by Dr. Sise, Dr. Miller, Dr. Thomas and others. We could not do our thyroidectomies without their help.

The postoperative effect of ether was always bad. After heavy barbiturates and nitrous oxide the postoperative period was quite free from nausea and vomiting. After cyclopropane many patients are quite nauseated for hours, and that may be said to be its chief fault.

In conclusion it would appear that our mechanical aids are sufficient, our knowledge of the chemistry and physiology is good enough, the skill of the anesthetist is ample. The ideal and perfect anesthetic agent, however, is yet to be found.

Franklin Young, M.D. (Terre Haute): I heard a comment on what our surgeons are doing in this. My feeling is in general surgery the anesthetist is the most important member of the team and on an equality with the surgeon. We have developed our technic surgically and our mortality is being lowered by the aid of the anesthetist. In our work in thyroidectomy we have gone through all these things—ether, nitrous oxide, local, came back to ethylene, back to local, and at the present time we are doing a great many with local. When you discuss anesthetic agents, I think they are all good, most of them, in selected cases, and I think if we select that anesthetic agent under which we work the best and get the best results, either local or cyclopropane or anything else, that is the best thing to do. To me the anesthetist is a partner in doing a thyroidectomy, equal to the surgeon. His duties from my standpoint are to observe, to watch the patient, the condition of the blood pressure, rate of pulse, general well-being and color. We can tell about the breathing. At certain stages of the thyroidectomy we confer with the anesthetist and get his report, and determine whether we will cease with the ligation, semi-lobectomy or complete the operation. In some cases, the bad heart cases, Dr. Sise and I may differ slightly. In the bad heart case I want to get the patient off the table in as good condition as possible so that he may go back to bed and take freely of fluids. When I use local anesthesia the anesthetist is always there. We are not always successful in carrying through painless anesthesia under local. The anesthetist administers the anesthetic agent, and a supplemental agent when necessary. With cyclopropane our patients go back to bed, I find, with a little more depression, a little more nausea than with local. With local, it is not unusual for them to take orange juice or coffee immediately, and many of them take lunch. We have that much start in getting food and fluid into the patient in the normal way, and prepare them for any reaction which may come on. We find there is less depression under local, but I feel that cyclopropane we may use more frequently. The nausea subsequent to some anesthetic agents may be just enough to turn the case toward the bad end of mortality rates.

F. T. Romberger, M.D. (Lafayette): Cyclopropane has been mentioned here a number of times this afternoon, and from what has been said, some of you may get a wrong impression. I believe you will all agree that no matter what anesthetic agent is used the postoperative condition of the patient is due entirely to one of two things, the patient's own reaction or the manner in which the anesthetic agent has been given. I think I am safe in saying that I can take any anesthetic agent you mention of those ordinarily used and produce with it deleterious or harmful effects upon any individual; and I can take any anesthetic agent and by different procedure, more skilful preparation, or more careful administration, obviate some of these effects. I believe the larger percentage of cases will vomit more or less, depending on the individual reaction. Cyclopropane is a powerful anesthetic agent. I contend that there are many times, especially in thyroidectomies or other surgical procedures, where extreme relaxation is not needed, when it is not necessary and is poor judgment to use it all the way through. The ideal agent is one which gives to the patient just enough anesthesia so that the surgeon may do the least amount of trauma surgically and thus correct the surgical condition and get the patient well. If your patient is too greatly nauseated, I would like to suggest giving the anesthetic agent which you know is a whole lot less nauseating, then after the depth of anesthesia is reached, if it is not sufficient, add a stronger anesthetic until that part of the procedure is past, then go back to the lighter anesthetic. By the time the operation is completed, you will have washed out all the cyclopropane anesthetic, and if you have any nausea and vomiting it will not be due to the cyclopropane. For example, with a patient who is toxic, you start on nitrous oxide oxygen, supplemented with preliminary narcosis, and a light nitrous oxide might be all that is needed to do the work, because thyroid surgery does not require exceedingly deep anesthesia in ordinary cases. However, if this patient, due to an idiosyncrasy or some other cause, not sufficient basal, perhaps, becomes restless, the light nitrous oxide is not sufficient to carry through.

What is the reasonable procedure? You might in the old days let a little gas flow over ether, or give a drop of ether occasionally until you get the stage you need. The minute we did not need it we shut off the ether, and the patient would go downstairs without any knowledge of having had ether. Why not do the same with cyclopropane? It is still in its infancy. Those who have worked longest have had quite a bit of experience; but, why not, knowing that patients vary in response to any drug, why not, instead of giving it up, try using it in the above manner? I know some have had limited experience and some none. I am offering a suggestion as to how to proceed. You can give it for one minute, two minutes, five minutes of deep anesthesia, giving it only so long as is necessary to control the case, then go back to the original mixture, and long before the patient is in bed you will have washed it out. That cyclopropane is intoxicating there is no doubt; so are all anesthetic agents. When you learn an appreciation of its benefits, plus how to handle it with each case, you will have less of the postoperative nausea than you have heard discussed here today.

L. F. Sise, M.D. (closing): I gather from this discussion that the speakers do not consider it well to use cyclopropane when only light anesthesia is needed. I believe the depth at which the patient is carried with cyclopropane makes a great deal of difference in the postoperative result. If he is carried at all deep with cyclopropane, it does have quite a little postoperative depressive effect and causes a tendency to nausea and vomiting, but if he is kept light, recovery is remarkably good. We have in cyclopropane a very flexible anesthetic; it can be varied nicely and accurately to suit the needs of the case. In the latter part of the operation, during ligation of the blood vessels and during closure of the muscles, the patient may be kept extremely light and when skin clips are applied may move somewhat. These patients do very well afterward.

Dr. Young's remarks about local anesthesia bring up the question whether we should not individualize our anesthetics a little more than we do. Some of these patients would doubtless be quite suitable for local or regional anesthesia, particularly if the operation were not very difficult.

THE POSTGRADUATE PROGRAM OF THE INDIANA UNIVERSITY MEDICAL SCHOOL AND THE INDIANA STATE MEDICAL ASSOCIATION WILL BE HELD IN INDIANAPOLIS MAY 10-14

BE THERE!

TREATMENT OF DISTURBANCES OF THE THYROID AND PARATHYROIDS AND OF ANTERIOR PITUITARY AND GONADS*

ELMER LOUIS SEVRINGHAUS, M.D.

Madison, Wisconsin



Dr. E. L. Sevringhaus

An attempt to present what we now know about endocrine disorders is in order for two purposes: (1) to point out what can be done wisely and safely by men in general practice; (2) to point out what should be left undone or left to specialists in institutions for clinical research. I hope you will understand that I am not trying to point out that endocrinology is not something for the general practitioner. This is an apology for the endocrine approach rather than an indictment of the general practitioner. This field of medicine is recent enough in its foundation and partial enough in its development that we cannot go as far as we would like until we have better diagnostic methods and better guides for therapy. The limitations of time make it necessary to omit any mention of diabetes which is the largest part of endocrinology, the treatment of obesity directly, and any mention of the adrenal glands, and to confine attention to the thyroid, parathyroids, pituitary and gonad relations.

The thyroid is the one gland which we understand best, yet we are far from the final word diagnostically. In the field of hypothyroidism I know none of us would miss a frank case of myxedema or cretinism and I will, therefore, not attempt to describe them. The diagnosis of the minor forms of hypothyroidism is still a bothersome thing. We should like to depend on the basal metabolism test for this, but we know we cannot unless we can have repeated basal metabolism tests and until we can find the minimum heat production. If we have to depend on one test, we will have to overlook many cases, because of the effect of emotional changes which increase heat production. Therefore, we attempt diagnosis by observation of weight, character of skin, character of mental and nervous activity, sluggishness, slow pulse rate, and prescribe thyroid more or less empirically on such a clinical diagnosis. That is safe provided the patient is going to remain under observation and not overdo thyroid therapy. Frankly, we must not believe that we are making a genuine diagnosis of hypothyroidism in that way, even though we get excellent results clinically. I merely mean that thyroid hormone is a potent

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material when given to any individual. It is potent in increasing oxidation in the body, consumption of oxygen, burning up of fat. It will accelerate pulse rate and it will tend to reduce weight. It can be used as a potent drug to accomplish such purposes, speeding up the pulse rate, speeding up oxidation, and making the entire nervous system somewhat more sensitive. That points out at once a number of contra-indications to the use of thyroid—whenever we desire not to speed up the pulse, not to increase nervous activity, and not to bring about a loss of weight.

To use thyroid for this purpose in myxedema or cretinism or the mild form of hypothyroidism, let me urge the use of one preparation and only one, the U.S.P. dried thyroid. There is no such thing as thyroid extract. It is a misnomer. There are a great many varieties of dried thyroid in this country today. I would group them for you in three types. The U.S.P. dried thyroid is made by five houses and standardized by the U. S. pharmacopeia on the basis of iodine content. This is the best standardization we have theoretically, but it is not perfect. The material made by any pharmaceutical house will vary, even that made by the best chemical methods, on the basis of iodine content. It may be well to stay with the product of any one firm so as to avoid variation. The second is the material made by the British pharmaceutical houses, in which the standardization is on a different basis, namely on the wet rather than the dry weight. If we use the British standard product, it takes five times as many grains as the American standardized product. This is as good but no better than the American product. The third group of thyroid preparations is that which is unstandardized. We take chances on what we are going to get from one bottle to the next. Even the manufacturer does not know. I think they should be tabooed. If we insist on the U.S.P. standardization or the B.P. we will know what our patients get. These are available in strengths of from one-tenth to five grains, the common tablets containing from one-half to three grains. I have never seen a thyroid deficient patient who required more than four grains a day, and that is a large dose. It is more common to use one-half grain to two grains daily. I see no reason to give it in divided doses. A single dose is preferable because it is less apt to be forgotten. Thyroid acts slowly. It takes forty-eight hours to get the maximum effect from a dose. If we give one dose today and the next tomorrow, the second dose enters into action before completion of the effect from the first dose, and consequently a gradual rise continues for days whether judged by basal metabolism, weight loss or what not. We cannot judge the effect of a given dose of thyroid in less than one month. It is not worth while doing a basal metabolism test once a week or twice a month unless we are studying the progress of treatment. In general practice, if using the basal metabolism test (the best test we have), check this once a month until the patient has reached the plateau in treatment. If the test is the same for two successive months we may be sure there is no increase or decrease in the cumulative dose. In the intermediate time, watch the body weight and pulse rate very carefully to be sure the dosage is not too great. Rapid pulse, increased perspiration and nervousness are the clinical signs of overdosage which anyone will recognize.

There is no use for the crystalline thyroxin in the clinical management of these cases because the dose must be greater since the absorption is poorer. Crystalline thyroxin is not the pure thyroid hormone as it occurs in the body. Evidence is pointing in the direction that the hormones which we have available, such as crystalline insulin, crystalline thyroxin, crystalline ovarian hormones are not the active forms that occur in the body. The naturally occurring forms act more slowly, due to combination with other compounds. Therefore, we find that the use of thyroid by mouth is better than thyroxin, either injected or fed, for the maintenance of thyroid therapy.

The opposite picture, that is hyperthyroidism, has had a great deal of attention because of its rather dramatic nature and because of the surgical approach. I should like to discuss the problem of making a diagnosis when the basal metabolism is only moderately elevated. Let me describe a doctor's wife who was brought to me by her husband because of an inability to gain weight. She was very slender and did a great deal of outdoor work in addition to housework. Her hands were a little sweaty. Her eyed filled with tears during the history taking, and she was nervous. She would occasionally skip a menstrual period. These were suggestions which would make us think that here was an overlooked hyperthyroidism. Physical examination showed nothing remarkable other than the things I have mentioned. Her basal metabolism was 28 per cent above normal. We did not consider that adequate reason to prescribe thyroidectomy. After making some other examinations we repeated the basal metabolism test and it was 15 per cent above normal, that is at the upper margin of the normal limits. No sedatives had been used, not even psychotherapy. We have other reasons to make us think that the difficulty with this woman is not resident in the thyroid but is probably a disturbance in the adrenal cortex. Progress has been excellent without any therapy to the thyroid. I do want to urge caution in examining such patients where the picture is suggestive but not classical of thyroid disease and where the basal metabolism on the first test is above normal but on repetition drops down to within normal limits. I think such patients should not be rushed into surgery too rapidly. We must think of other factors.

Shall these patients who have hyperthyroidism be submitted to surgery or radiation? I should

recommend surgery where the need for treatment is urgent, where there is obviously a problem of malignancy that ought to be eradicated. I should urge radiation when the need for haste is not apparent or when the operative risk is very poor. On the other hand, I should say that surgery should not be undertaken unless it be by a skilled surgeon who is especially ready to manage a very unstable patient. Radiology should never be undertaken except by a radiologist who is capable of measuring the dose, and in cooperation with an internist who can follow the case and who knows when enough radiation has been given. Radiation should be given in moderate and in divided doses. The result of radiation will occur from one to three months, and then we re-test the patient to see whether a second series is necessary. That calls for prolonged observation, but it may avoid surgery and its reactions. The end-results of x-ray treatment are as good as with surgery. Recurrences are known with both methods.

The after-care of these patients is important. Many of them are not well after surgery or after radiation. That brings up the whole concept of exophthalmic goiter, Graves' disease. There are some people who have a certain type of nervous disorder which is probably congenital and which is exaggerated by thyrotoxicosis, but which persists even after the thyroid is adequately treated. These must be managed from a medical point of view after treatment. This is the type that should be managed by the general practitioner and not by the psychiatrist.

The third important thyroid problem in the Great Lakes region is the prevention of goiter. I think we can now say with confidence that almost all goiters can be prevented if the intake of iodine is adequate. Whenever the intake is inadequate the deficiency shows up as colloid goiter. This is the background for a considerable part of the toxic adenomas, colloid and exophthalmic goiters. We shall not only prevent colloid goiter but the more toxic forms if we use iodine during childhood. Furthermore, we know there is a need for iodine during adult life, though not as great as in childhood. The common method of supplying iodine is by iodized salt. This is a public health problem, to determine whether it is taken by a large enough share of the population and taken regularly enough. I think the medical profession should be increasingly careful about urging use of iodized salt. The risk of taking iodized salt is only that we may not get enough. The risk of giving too little is not yet controlled. It seems only reasonable to expect that iodine content of salt should be as much subject to control by public health authorities as the bacterial content of milk, because they are matters of public concern.

PARATHYROIDS

The parathyroids are glands very much smaller and frequently much less understood than is the thyroid. Spontaneous lack of parathyroid activity is rare. It does exist with so-called spontaneous or idiopathic tetany. There are a few cases of permanent destruction of the parathyroids to such a large extent that treatment has to be maintained. A few years ago we thought that the whole problem had been solved when parathyroid hormone discovered by Collip was put on the market. This is not a pure product, but contains sufficient foreign material to give a foreign protein reaction. If used over a long period of time the body becomes accustomed to it and the effect is lost. We now know we can accomplish better results if such cases of tetany are treated by a diet low in phosphorus and high in calcium, and sometimes by the use of vitamin D or viosterol, reserving the use of parathyroid hormones as an emergency. The diets are a little hard to manage. They are published by Reed Ellsworth in the *Medical Clinics of North America* for 1932-33. They are essentially diets low in meat and milk, high in vegetables and fruits. It is important that the milk and dairy products be kept very low to reduce phosphorus intake, and that adequate calcium be supplied. In feeding more calcium salts, we have the choice between calcium gluconate, calcium lactate and calcium chloride. They should be given before meals, one-half to three-quarters of an hour, in order to get better absorption. Calcium gluconate is less effective than calcium lactate or chloride. Calcium gluconate is more safely injected. We formerly thought we could not give calcium chloride in large amounts orally because it is a protein precipitant. Calcium chloride may be dissolved in water very easily, to make a solution of 25 per cent. We can administer calcium chloride in such simple things as elixir adjuvans or wild cherry syrup, 15 grains in a teaspoonful, and in that way get calcium into the body very regularly. If we want to give it in solid form, we use calcium gluconate or lactate tablets in 15 grain doses. These should be dissolved in water before taking. Whether these cases should be given viosterol or not is subject to active debate. Viosterol tends to raise the phosphorus as well as the calcium and has that disadvantage. Some cases do better with viosterol or vitamin D. Some clinical experiment is necessary to make sure whether the effect is better with than without.

For antitetanic parathyroid hormones, three preparations, Lilly, Parke-Davis or Squibb, are available. Doses are usually about 100 units.

The picture of hyperparathyroidism has had some publicity from the Massachusetts General Hospital through Dr. Albright and his co-workers. They have found two types, one in which there is osteoporosis or polycystic disease in the bone, followed by multiple fractures or deformities, and the other in which there is increased calcification in the renal parenchyma and the formation of repeated stones in the kidney pelvis or in the ureter. Either type, multiple fibrocystic disease of the bone

or repeated kidney stones, should lead to a search for evidence of hyperparathyroid disease. This is a case where the general practitioner will have to send his patient into a special hospital, because he cannot make a diagnosis from the x-ray, but must confirm it by a study of the blood calcium and phosphorus. The blood calcium has to be determined on fresh blood serum taken under certain conditions. Any problem of this kind should be referred promptly to a medical center where these tests can be made. This is important because if these patients are allowed to go on they will have deformities, or if renal calcinosis is allowed to go on long a permanent type of destruction of the kidney follows or recurrent stones may cause damage to the kidney. Those are cured by removal of the parathyroid tumor. They do not need calcium therapy because the bones are becoming porous. The fact that calcium is pouring out in the urine does not mean that the patient needs calcium. This disease puts more load on the kidney and we cannot repair the damage by calcium feeding.

PITUITARY

The pituitary is the gland that is blamed for everything because it has such a wide variety of activity. It is difficult to evaluate the importance of this gland because laboratory and clinical reports are appearing too rapidly. As to the relation between the pituitary and diabetes mellitus, clinically it means little to us except that we should keep our eyes open for evidences of this relationship. Certainly we should not operate on the pituitary or radiate the pituitary to cure diabetes.

The posterior half of the pituitary gland is the one we are best acquainted with because it causes contraction of the uterus, contraction of the blood vessels, with elevation of blood pressure. Posterior pituitary extract or pituitrin, which is one commercial preparation of it, is a useful material in a number of troubles, particularly useful to the obstetrician and to anyone who has to treat diabetes insipidus. If the diagnosis of diabetes insipidus is fairly sure, eliminating nephritis or habitual increased intake of water, pituitrin will control it. We have known for a number of years that pituitary extract on cotton in the nose will control diabetes insipidus without taking it intramuscularly. Crude pituitary powder snuffed once to six times a day will give as much control at a very low cost.

There are three features of anterior pituitary disease about which we can do something clinically, but even these are in the experimental stage. One is gigantism. We know excessive action of the anterior lobe causes gigantism or acromegaly. Under-activity is responsible for dwarfism, but not all dwarfs are the result of anterior pituitary disease. We should determine whether the dwarf child is dwarfed due to anterior pituitary disease or pancreatic or renal infantilism or germ plasm defects. The history may help. A careful physical examination may show evidence of hypothyroidism rather than anterior pituitarism. All dwarfs, where there is no other cause for the dwarfism, should be given anterior pituitary treatment to help them to normal stature before the epiphyses have united. That means that x-rays of the bones should be taken by someone who is able to interpret the age of the bones. The bones show by the centers of ossification at a given calendar age whether the physiological age is comparable. The experienced radiologist can tell whether the bone age corresponds to the calendar age or is markedly retarded. If the calendar age is ahead of the bone age, thyroid therapy should be used; if the bone age is up to the calendar age then anterior pituitary should be used.

We have no confidence that oral pituitary therapy is of any avail. We will have to turn to hypodermic therapy. There are at least three preparations, Squibb's, Parke-Davis', and the Wilson Laboratories'. If the use of a full dose does not develop any growth in six months, I think it means that the dwarfism is not due to the pituitary.

Another type is Simmonds' cachexia. It needs little description because it has been mentioned in the literature for some time. A few cases have been strikingly relieved by the use of some type of pituitary growth promoting extract from these three firms.

The third thing is the use of pituitary materials for the stimulation of the testis or ovary. We have no doubt that there are materials available on the market. Prephysin, which I have used, contains chiefly the factor which stimulates graafian follicle growth, and even this we do not understand well enough to lay down any rules about prescribing it. It has to be observed over a period of years before we know what we can accomplish in the way of stimulation of undeveloped ovaries.

The testicular hormone material has not been available on the market until this year. There is testo-sterone which is going to have some real place in treatment. Here again we will have to add careful clinical observations to the experimental data in order to find out whether it helps sterility or merely the climacteric. It will be more helpful in the latter, I think.

The ovarian hormone is better known because it has been available for eight years. Before we try to go into detail as to what can be done with it, let me point out that under-activity of the ovary can be expressed in three ways, by under-activity of the graafian follicle, by failure to release the ovum, and by failure to form a corpus luteum. Failure to release the ovum will result in sterility. Failure of the graafian follicle to be active or failure to maintain its plane of activity will lead to failure of development of the sex life. With failure of the follicular hormone produced by the graafian follicle, the so-called sex hormone, we have various pictures of incomplete development

of or loss of secondary sex characteristics when it comes later in life.

Failure of the corpus luteum to develop affects the contracitility of the uterus, and is responsible for dysmenorrhea in many cases. Therefore, corpus luteum hormone or progestin can be used in dysmenorrhea. It has been very helpful. We do not yet know the minimum doses that are necessary. There are at least two standard preparations on the market, Proluton and lipo-lutin, which have been very helpful in controlling dysmenorrhea. It, unfortunately, costs from two to five dollars for the doses needed per period, which makes it rather expensive treatment. When we learn the minimum doses necessary, the cost probably will be less. Another field for progestin is the control of certain types of contractility and over-activity of the uterus in early pregnancy. There is a real field for this hormone in obstetrics and gynecology.

I think it will be obvious to you that it will be futile to use either one of these hormones, follicular or corpus luteum, to treat sterility when that sterility is due to failure to liberate the egg or develop the ovum. Infertility is a highly complicated question and it needs approach from urology and gynecology.

The treatment by means of follicular hormone is very useful in two types of conditions. One is the vaginitis due to gonorrhea in girls before puberty. Here the follicular hormone has been given by vaginal suppositories. The materials used are Amniotin suppositories of Squibb or Theelin of Parke-Davis. In treatment of the menopause, the question is whether one should give follicular hormone by mouth, by intramuscular injection or by vaginal suppository. Vaginal suppository is not as effective a means of treatment and it is more expensive than treatment by mouth. Treatment by intramuscular injection is widely used. I do not like injections of Theelin in oil into the muscle or under the skin. I think we are running a risk of foreign body reaction. I do not like intramuscular use of a hormone when the material can be given by mouth. I know from experience of years that we can control any climacteric difficulty by the oral method. I prefer only one route of therapy for menopausal conditions and that is oral therapy with a standardized follicular hormone. The standardized materials in this country are Amniotin made by Squibb, Theelin by Parke-Davis, and Progynon made by the Schering Corporation. Amniotin is put up in an oil capsule of 1,000 international units. Theelin came on the market a little later and is put up in capsules. Progynon has come out in a new form, known as Progynon-D.H. This latter is a synthetic crystalline pure substance which is probably the hormone as it occurs in the ovary. Amniotin and Theelin are also chemically derived and occur in urine. They are not identical with the hormones found in the ovary but have a similar action. The problem comes down to how much it costs a patient to get relief. It is going to be a matter of buying the most units per dollar.

Therapy for the menopause ought to give absolute relief from hot flashes, nervous irritability, tendency to easy crying. If we raise the doses rapidly, it will be only a very short time before the patient will get complete relief, and then gradually reduce the dose. Patients go through the menopause sooner than if we gave a smaller dose. We always start with a large enough dose to give relief soon and then reduce the dose. We instruct the patient to report when she has an increase of symptoms, increase of hot flashes, increase of nervousness. If the patient understands these things she will learn to manage the problem under guidance fairly rapidly.

CONCLUSIONS

In conclusion, let me again point out that these materials are active and sometimes useful even though there may be no demonstrable physiological basis, just as we give thyroid to cause clinical results without definite hypothyroidism. It may be useful to employ these materials to achieve results. We must think of these hormones as endocrine materials which can speed up physiological processes, and we must respect them as active agents just as we have learned to respect our ordinary drugs of other types.

ABSTRACT

THE SERODIAGNOSIS OF SYPHILIS

H. H. Hazen, Washington, D. C. (*Journal A.M.A.*, March 6, 1937), points out that a study of the tests used on the spinal fluid has revealed that certain of the flocculation tests are not suitable, although some others are just as efficient as are the complement fixation tests. Tests on patients who have been treated with malaria or with more than twelve injections of tryparsamide or fifteen injections of arsphenamine show marked discrepancies in the reports of individual observers. Tests on the fluid from untreated cases of cerebrospinal syphilis show more uniform results. In general it should be noted that even in untreated patients the sensitivity of many tests is unsatisfactory. It is certain that tests on the spinal fluid must be chosen with the greatest care. From the standpoint of specificity the Brem, Eagle flocculation, Kahn diagnostic and presumptive tests, Kline diagnostic and exclusion tests, Kolmer, and Lufkin and Rytz have been found to be satisfactory. From the standpoint of sensitivity the leading tests are the Kahn diagnostic and the Ruediger tests, with the Brem and line diagnostic tests close behind. Syphilis can often be diagnosed by other means than serologic. It may be true that during the early eruptive period the serologic test is much the best confirmatory evidence, but in the early chancre the darkfield in skilled hands is infinitely better. The mouth contains spirochetes very similar to Spirochaeta pallida. It is conceivable that such organisms might be found on other portions of the body, if only for a short time. In late syphilis an x-ray study of the bones or the aorta may be invaluable. In neurosyphilis there are other valuable tests on the spinal fluid in addition to the serologic ones. Women who have been pregnant frequently show a negative blood serologic test. In this class the history of repeated miscarriages, or the findings of a syphilitic placenta, are of the greatest aid. Every pregnant woman should have her blood examined for syphilis, preferably during an early period. As is invariably the rule, a laboratory procedure is a good servant but a bad master.

THE SERVICE OF THE AMERICAN MEDICAL ASSOCIATION TO SOCIETY*

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Dr. Charles G. Heyd

As I have sat here I have been prompted to reflect upon the changing world of politics and medical practice. My mind has rapidly surveyed some of the epochs in history, epochs that have touched the doctor and his various organizations. One of the most outstanding features of life is the tremendous increase in the population. For example, in 1800 continental Europe had a population of 180 million people and in 1925 the same geographical area had 460 million people. This biological factor of population has tremendous political implication. In the final analysis it means that the "mass" controls the destinies of society. It invariably develops pressure or compulsion groups in government.

I thought of what was probably the first organized medical society. When the doctors took the Hippocratic oath they subscribed to a Code of Ethics which represented the best ethical thought of the period. It was such a profound ethical conception that it has remained undiminished through the centuries.

Furthermore, I reflected upon the thousand years of intellectual darkness where only medicine seemed to survive by being transplanted by the Arabs from decaying Greece, through Asia Minor and into Spain. The medical information of the time was guarded in monasteries and the priest fulfilled the function of the physician.

Two things stand out in medical knowledge—discovery and distribution of information. It would have availed Banting little and society not at all if the discovery of insulin had not been made known to the professional world. Hence, medical societies. In 1858, a man by the name of Perkins added sulphuric acid to coal tar and produced one of the aniline dyes. From that humble beginning over eight thousand derivatives were subsequently discovered. Behind Perkins' discovery was an illimitable background of unseen values. So your medical society with its expanding functions represents unseen social values for the community.

The history of the United States exhibits in many of its details the progressive changes whereby society has advanced from a simple form to that of a complex organization. From the founding of America at two significant points—New England and Virginia—there was a progressive evolution of the individual as such into groups. For almost a century individualism remained the distinctive quality of American life. Later the individual was to pass into a group as a result of two distinctive social conditions: (1) Industrialization with urban concentration and (2) the closure of the western frontier. Jackson in his *The Frontier in American History* interpreted these social forces in terms of American democracy. Without straining at phrase making, one may in some measure discuss a frontier in medical practice. At the time of the American Revolution medical practice was developing as a native product with representative practitioners exhibiting qualities of high courage and great medical character. McDowell in 1809 performed the first reported oophorectomy; he was preeminently an individualist in the practice of medicine, possessing all the workable knowledge in medicine of his day, plus the pioneer and exploring spirit which today might be called the spirit of research and discovery. Our physicians of that day turned to the great medical centers of Europe: Paris—which gave inspiration to the New England schools of medicine, and later to Edinburgh which is more properly identified with the development of the medical schools of Philadelphia and Canada. In 1790, 90 per cent of our people were engaged in agriculture. In 1850 one-half of the total wealth of our country was farm wealth. In 1890, 30 per cent of our population were farmers. In the intervening one hundred years America exhibited two fundamental traits of organized social development. First, the rise of the city with a more industrialized north, and which became a significant prelude to the Civil War, and second, the westward extension of the frontier—the individualist—the pioneer crossing our Western mountains in successive waves and finally reaching the Pacific. By 1890 all the free lands had been preempted by settlers and the individual and pioneer stage of American life became moulded into various forms by the development of "pressure groups." Since 1890 our population has doubled and our graduate students of institutions of higher learning increased over 1,600 per cent, representing a huge upsurging of highly trained individuals. In 1905, we had 165 medical schools and today 65, yet the number of physicians graduated annually is approximately the same as when 165 medical schools were in existence. Our annual production of doctors exceeds our annual death rate of physicians by some 1,400.

We have today many forms of socialized medicine—the care of the insane and the epileptics in state-owned sanataria; also the treatment of tuberculosis is largely under the auspices of the state.

The individual discoveries of doctors have been utilized by the sanitary engineer for the benefit of the community. The most noteworthy example is the almost complete disappearance of typhoid fever from our cities.

* Presented before the Secretaries' Conference in Indianapolis, March 21, 1937.

It is possible to see further extension of some forms of socialized medicine without changing the patient-physician relationship. We believe that any contacts of the medical profession with the public should be within the functions of organized medicine. Your county medical society is concerned with the contacts of the doctors within the county, with the public, public health agencies and with conditions that are local to the county. Your state society is concerned with the legislative functions of medicine, with the standards of medical practice and with what is today probably our biggest problem in medicine—the economic problem.

There is a fundamental difference between organized medicine and a union of doctors. Artisans, plumbers and carpenters unite and become congregated into so-called unions, the sole purpose of which is to control the compensation, hours and division of labor. Organized medicine does not concern itself with unionism or with that political background. Beyond the county unit and the state unit is the American Medical Association, the most democratic organization in medicine, for through your representatives from the state societies, you express the fundamental conception of democratic government—the will of the majority shall represent the policy of the Society. Therefore, it behooves all of us to see that through the county unit and the state society we are prepared to support the policy of the American Medical Association with our personal influence and cooperation.

Medicine today is probably the most liberal of all of the professions of society. It recognizes additions to its knowledge from any course and the present edifice of scientific medicine has been reared upon the labor and contributions of innumerable physicians regardless of race, color or creed. Medicine knows no national boundaries, and is world-wide in its acceptance of scientific discovery and in its labors for the alleviation of human suffering, and the prolongation of life and the maintenance of health.

In the midst of world-wide political strife, economic uncertainty, civil war, foreign war, and domestic disturbances, medical service continues. The doctor does not "strike," nor dislocate the progress of medical service by "sit in strikes" or picketing. The profession is responsive to all calls for help and the pages of its history are adorned with the names of men who have died at their posts. In calamity, catastrophe, pestilence, the annals of its history reveal innumerable names of men who have volunteered to contract disease and who died from it so that society might benefit by their example and by the experimentation with their bodies in the conquest of disease.

If the American Medical Association did not exist it certainly would be invented, for it came into being in response to the demands of society.

The history of medicine indicates how the doctor mirrored the social and economic background of his period. Beginning in the most remote period of recorded history we find the physician. He developed coterminously with religion and for many centuries was identified in various parts of the globe with the ritualism of religion. The gap from the Greeks to the Renaissance, roughly a thousand years, was bridged by the great medical compiler, Galen. So profound was the influence of Galen and his authority so unquestioned that as late as 1560 we find a Dr. Geynes was refused admission to membership in the College of Physicians and Surgeons in London "until he had signed a recantation of his error in having impugned the infallibility of Galen." (P. 65, *La Wall.*) The infallibility of Galen was quickly dispelled, Pare, Harvey, John Hunter, Jenner were soon to liberate the human mind from the thralldom of illogical authority. The fetters of the dead and classical languages that bound down the profession were also to be broken, for when John Hunter was challenged with ignorance of the classical languages by the pedant, Jesse Foote, he replied, "I can teach Jesse Foote on the dead body more than in any language, dead or living."

A recent list shows that there are now 139,309 physicians in the United States in active practice. Of these 8,698 are over sixty-nine years of age; 3,608 are on the staffs of hospitals; 42,154 are specialists of various kinds, including 12,152 surgeons, 3,501 internists, 3,529 pediatricians, 349 psychiatrists and 549 in public health work. Of the specialists 21,644 (51.3 per cent) are in cities of 100,000 population or over, while 35,899 general practitioners (38.3 per cent) serve cities of similar size. The figures also show 65,790 dentists, 8,192 osteopaths and 5,449 chiropractors.

The American Medical Association is composed of over 104,000 members. It is a federation or union of several state medical societies, with the United States dependencies, under a central authority. This authority is brought into being by the election of delegates from each state and territorial medical association. These delegates assembled in a House of Delegates legislate on all matters of general polity.

The object of the American Medical Association is to advance the science and art of medicine and to promote public health. It is dedicated to a public service. The American Medical Association was founded on May 5, 1846, under the inspiration of Dr. N. S. Davis, of New York, and in the next year delegates met at Philadelphia and promulgated a national code of ethics together with proposals on medical education. The first meeting was held in Philadelphia in 1848. In the 89 years since its founding the American Medical Association has assumed functions and labors beyond the dreams of any of its founders.

In the middle of the nineteenth century medical education was frequently haphazard and crude, with only a few colleges with organized teaching curricula. Of medical societies there were plenty. There were a few great and powerful medical

schools, also many commercial proprietary and poorly equipped medical schools, organized and maintained for profit. With the formation of the code of ethics and scientific assemblies, the main activity of the Association was to promote facilities for better medical education. In 1905, the Council on Medical Education and Hospitals was founded and it became the chief agency for improving the quality of medical schools and thereby obtaining a more competent education of doctors. This Council was concerned, amongst other things, with the following activities: (1) To consolidate public opinion in order to diminish the number of medical schools; (2) to raise the educational qualifications of medical schools into class A schools; (3) to inspect and certify approved hospitals, hospitals that were approved for internship, hospitals approved for residents, and (4) more recently, the certification of specialists in the twelve major specialistic divisions of medical practice.

When one thinks of the galenicals, the shotgun prescription and polypharmacy, the pills compounded out of every conceivable kind of animal and vegetable refuse and offal, one can understand the force of the Aesculapean "Curare, cito tuto et jucunde." If this injunction was necessary in pagan times, adequate control of medicaments is imperative in modern times. With the rise of chemistry and the ability of chemists to displace certain atomic groups at their will, multiplicity of pharmaceutical commodities was apparent. It was necessary for some body of national importance to devise means of protecting the public from false deleterious claims of therapeutic effectiveness and to keep the field of medical prescribing clean and respectable. The Council on Pharmacy and Chemistry was the response to this necessity. The Council on Pharmacy and Chemistry stands as a beacon light of truth between the public and the physicians and effectively prevents the exploitation of either group by commercial enterprises.

In a similar manner the multiplicity of instruments using electrical modalities made it imperative that standards be devised, definitions determined and controls established to obviate dangers inherent in their use. Thus came into existence the Council on Physical Therapy.

Scientific discovery would be of no avail nor its application to medicine possible without three definite ancillary features: (1) The discovery must be evaluated in terms of clinical usefulness; (2) if proved efficacious, the information must be widely diffused; (3) it must be made available for the treatment of disease, to lessen human suffering, or to promote health. For these particular functions, the American Medical Association has the Council on Scientific Assembly and the Committee on Scientific Exhibit.

If that is essential in regard to the use of medicaments, then the same measure of responsibility to the community with regard to foods would also be apparent, and thus one of the activities of the American Medical Association is the Council on Foods.

From the 48 states, Porto Rica, Hawaii, Alaska and the Panama Canal Zone, there arises a large number and variety of legislative enactments bearing upon the practice of medicine. The interpretation of these various acts requires a full-time staff of lawyers, and technically trained assistants, and the American Medical Association has its Bureau of Legal Medicine and Legislation.

Fully one-half of the funds of the American Medical Association are spent in public education and it is significant that one of the most useful adjuncts to public education is carried out by the Bureau of Health and Public Instruction.

In most newspaper offices there is what is known as the "morgue." In this department is kept a comprehensive index with clippings and data on most of the distinguished citizens. But of more importance to the medical profession than to the lay journals is an index of the irregular practitioners, the fakirs, the charlatans, the crooks, and one of the very extensive features of the headquarters office in Chicago is the Bureau of Investigation. The Bureau of Investigation is one of the educational activities of the American Medical Association and has, for its primary object, the collection and dissemination of information on "patent medicines," quacks, medical fads, and various other phases of pseudo-medicine. It is a clearing house for information on the subjects with which it deals. Federal, state and municipal health officials, teachers in schools and colleges, physicians, and others interested in the public health refer inquiries to the Bureau of Investigation.

The Bureau collects its information through (a) original investigations often supplemented by analytical work done in the Chemical Laboratory of the American Medical Association or in other high-class laboratories; (b) data received from Federal sources (the Food and Drug Administration of the United State Department of Agriculture, post office fraud orders, Federal Trade Commission, etc.) as well as from state and municipal boards of health; (c) information published in technical and other journals, both domestic and foreign, and (d) reports of special commissions, etc.

With the development of mass methods in industry came changes from the agrarian to the urban type of life. With the development of the automobile and good roads there came a change in the economic relationship of the doctor to society. The development of free clinics, free hospital services, free treatment clinics, changed in a great measure the usual sources of the physician's livelihood. The diverse character of the economics of medicine in the different states, the large office maintenance expense of physicians in centers of population, introduced a multitude of conflicting factors. In the effective interpretation of these various movements, functions the Bureau of Medical Economics.

For the necessary research on food and pharmacy and chemistry is one of the most complete, thoroughly equipped chemical laboratories extant. The instruments contained therein, particularly the recently acquired instruments for spectrochemical analysis, are in keeping with the policy of the American Medical Association to utilize the most modern equipment in their chemical research problems.

From time to time there may be a difference of opinion in regard to juridical procedure or definitions of jurisdiction between local county units and state units, or perhaps differences between state societies. For this purpose, we have the Judicial Council.

This vast complex organization that I have briefly indicated is administered in the interim between the House of Delegates meetings by the elected general officers and the meetings of the Board of Trustees.

At our annual meeting the fifteen scientific sections, the Scientific Exhibit and the Commercial Exhibit are devoted to the presentation of scientific papers, research data and acceptable commercial products.

Figures may mean much or little, yet they do convey some idea of the activities of your Association. The Bureau of Investigation answers from 11,000 to 13,000 direct inquiries each year. The Bureau of Health and Public Instruction about the same number.

Fifty-two issues of the *Journal of the American Medical Association* are printed each year, twelve issues of each monthly publication, twelve issues of *Hygeia*. Also, 1,608,450 pamphlets of varying size (four pages to sixty-four pages) and 38,000 hard bound books are printed annually. During 1936, approximately 4,852,000 copies of the *Journal of the American Medical Association* and approximately 1,250,000 copies of *Hygeia* and 266,000 copies of the various monthly publications were printed.

Approximately 2,000 tons of paper are used annually in publishing the *Journal of the American Medical Association*. About 1,000 tons of paper are used in the publication of *Hygeia*, the eight monthly publications, *Quarterly Cumulative Index Medicus*, books,. the printing of circulars and in office requirements.

It is estimated that copies of the *Journal of the American Medical Association* mailed in 1936 weighted 3,942,000 pounds (1,971 tons).

The number of office employes at headquarters is 323, the number of factory employes, 242; total number of employes, 565. There are 106 employes in the various bureaus and councils. They are included in the office employes listed above.

In certain seasons of the year the Accounting Department will receive over three thousand pieces of first class mail in one day. Ninety per cent of these pieces contain remittances and pass through the records the same day. This is expedited by a tabulating machine, in which proper allocation of each remittance is made to its respective account. The checks are deposited the following day, after they have been endorsed and tabulated on a special machine. The Accounting Department controls all of the financial records of the Association, but for expediency the personal accounts of subscribers and Fellows are segregated in special departments, though the Accounting Department maintains a strict control of the accounts.

The main press room is located in the basement of the Headquarters Building. The equipment consists of fourteen flat bed presses and three rotary presses. Flat bed presses print about nine hundred sheets per hour. Monthly publications, the *Hygeia* cover, the *Journal* cover, circulars and sundry office forms are printed on these presses. These presses will print a page size of 8½ by 11½ inches in forms of thirty-two, sixty-four and ninety-six pages respectively, trimmed and cut. The ninety-six page press will print two colors simultaneously. A continuous speed may be maintained on the rotary presses of approximately 4,500 copies per hour.

In conclusion, gentlemen, this is your company, you are part of the stockholders of this enterprise. It has been created by fellow craftsmen in your own art. It has attained a preeminent success. It has divorced itself from the conflicting emotions of politics, has made no demands upon the public purse, has been faithful to its ideals, and is an inspiration in its beneficent donations of heart and mind to the community.

116 East Fifty-third Street.

ABSTRACT

ATHLETIC INJURIES

Marcus H. Hobart, Evanston, Ill. (*Journal A. M. A.*, Aug. 15, 1936), demonstrates that, owing to the present widespread interest in athletics, the study and care of athletic injuries is forcing itself more and more on the attention of the medical profession. The physician should be in full control of the physical side of the team, as the head coach is in charge of the athletic side. They should work together. Under the doctor and the coach there should be trainers, masseurs and physical therapists whose duty it is to keep the men in condition, but any special treatment should be prescribed by the doctor and supervised by him. Complete harmony should exist between all those in charge. All athletes should have a physical examination at least each season. The heart, pulse and lungs should be checked over, examination made for hernias, and any other abnormalities noted. There should have been a recent successful vaccination against smallpox. All injuries should be reported immediately to the team physician. Athletic injuries demand special consideration by the medical profession as they are in a class by themselves. It is necessary for an athlete to obtain a quick but none the less complete cure. Certain advances have been made in the treatment of specific athletic injuries. This review includes twelve years' surgical experience in handling athletic injuries at Northwestern University. Detailed statistics cover a five-year period (1930-1934) during this time. In treating or coaching athletes, it should always be borne in mind that all serious or permanent disabilities should be prevented and that the individual should come first and athletics is purely secondary.

REPAIR OF DEPRESSED DISFIGURING SCARS BY MEANS OF RIB CARTILAGE IMPLANT*

HAROLD M. TRUSLER, M.D.
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Depressed unsightly scar deformities about the face and head constitute a difficult problem in plastic and reconstructive surgery. I am referring primarily to the bone defects caused by compound or comminuted fractures of the forehead, brow, and other bony eminences about the face. The depressed scars involving only the soft tissues constitute a fairly simple but entirely different problem not within the scope of this article. In all severe lacerations or compound fractures of the face, much depends upon the skill with which the initial repair is made, but that phase of the problem will be omitted from this discussion. It is my purpose now to discuss briefly what may or can be done in the secondary reconstruction of depressed unsightly scars. It is true that some individuals are not disturbed by such blemishes and, in that event, there is no problem.

There are individuals to whom personal appearance is of such importance that an unsightly scar may cause distressing embarrassment or mental anguish or gross distortion of personality. In many instances, a physician advises the patient that the scar is not a matter of fundamental significance and nothing should be done about it. The patient, however, continues to seek aid and too often falls into the hands of an ignorant or unscrupulous but convincing charlatan who adds insult to injury, for cash in advance.

To sum up this introductory discussion, I need only state that surgical intervention is justifiable even though the problem be purely one of esthetics, provided the disfigurement is real, and the patient is given an honest statement of what can be done and how much improvement can be expected.

An illustrative case is that of a young woman, intelligent, charming, and good looking, who had suffered a severe compound fracture of the right frontal area in an automobile crash which almost killed her. A surgeon in another city had decompressed the area and removed the comminuted bone fragments following which she slowly recovered her physical and mental health.

One year later, when I first saw her, she presented a startling sunken defect of the right brow and forehead with two red hypertrophic scar lines extending upward across the depressed area. The unsightly discoloration of the scar cannot be shown by photograph. The sunken defect, however, is plainly apparent in figure 1.

For reasons which will be presented in the discussion to follow, I decided that a graft of rib cartilage offered the best means of reconstruction. A brief description of the procedure follows:

An impression of her face was taken in plaster paris. Then a stone mask was made from the plaster mold. Using this mask, a metal pattern of the defect was reproduced, likewise a poured-metal casting which gave the exact shape and size of the graft necessary to fill the defect.

At the time of operation the metal mold and pattern were boiled with the instruments. Through a right costal incision, the rib cartilage graft was removed in one piece from the junction of the seventh, eighth and ninth ribs. The patient's face was covered with sterile drapes, and the forehead area was prepared with tincture of merthiolate. A small incision was made in one of the pre-existing scars on the forehead and was carried across the sunken defect in the brow line to facilitate the dissection. The entire thickness of the scalp, including the fragmentary frontalis muscle, was lifted from the bony defect by careful blunt and sharp dissection. It was found that the outer table of the skull including the frontal sinus was entirely gone from the scarred area, together with most of the diploe. The inner table was intact with the exception of a small area just above the brow where the dura was exposed.

The metal mold greatly facilitated this dissection. When the dissection was completed and the casting would fit perfectly in the subintegumental tunnel, the cartilage graft was trimmed to size and shape. This is a difficult procedure which was aided by use of the metal plate pattern previously described. The graft was trimmed slightly oversize to allow for shrinkage. After satisfactory hemostasis, the graft was slipped into place, the fascia was closed with a few interrupted sutures of fine chromisized catgut and the skin was closed with horse hair. Throughout the operation, the aqueous solution of merthiolate 1 to 5,000 was used for irrigating the wound and washing the graft during the process of trimming and fitting. Healing occurred by first intention, there was never any sign of infection, and convalescence was rapid and uneventful.

Several months later, under sodium amytal and novocain local block anesthesia, the skin scars were excised and the small protruberances of the oversize graft were trimmed to give smooth contour. The cartilage graft was every where firmly adherent to the bone by fibrous union and was otherwise unchanged in appearance. The final result is shown in figure 2. The two vertical skin scars, though not unsightly, are quite visible.

Though a third operation would further improve the result, it should be recognized that vertical scars on the forehead are always more difficult to eradicate than are transverse scars, and also that, by optical effect, two parallel scars are always surprisingly more noticeable than is a single linear scar. Of these facts the patient was warned at the outset. She is pleased with the result and is extremely grateful.

* From the Division of Plastic Surgery, Indiana University School of Medicine.



1. Showing bone defect and scars of forehead.

2. Post-operative result showing reconstruction of supra orbital ridge and replacement of bone defect by rib cartilage graft.

3 and 4. Stone mask of face together with metal plate and pattern of the skull defect.

DISCUSSION

In the past, various substances have been prescribed for the repair of skull and facial defects. All foreign substances such as paraffin, metal, ivory, or celluloid plates may be dismissed with a few words. The disastrous results of paraffin injection are now generally recognized. Persistent foreign body reaction with disfiguring tumefaction and hideous paraffinoma formations are almost inevitable after a lapse of a variable time. Metal plates and ivory implants practically always cause foreign body reaction and persistent drainage or other irritation sufficient to require removal. I

know nothing of the fate of celluloid plates but personally would not care to use them.

Autogenous bone grafts are satisfactory and may be taken from the outer table of an intact area of the patient's skull, or from the inner surface of the ileum. Extraneous bone grafts act as sloughing foreign bodies.

Where actual bony union is not required and the defect is not too great, rib cartilage is ideal. It is much more certainly viable than bone and also resists infection much better. These facts are easily understood on the basis that cartilage is a totally avascular substance. In many situations, it affords considerable technical advantage in that it permits accurate trimming for contour. In the case I have described, the problem of restoring accurately the contour of the supra-orbital ridge made rib cartilage especially desirable.

THE PROBLEM OF INFECTION

In any operation involving the transplantation of tissue, the problem of infection is one of major consequence. It is true, as previously stated, that cartilage resists infection quite well. Nevertheless, frank suppuration does occur and will vitiate the reconstruction.

Moreover, surgical fields about the face are certainly not well adapted to strict asepsis. It is for these reasons that I advocate the use of mild antiseptic solutions freely in these wounds. An escharotic antiseptic, however, is worse than useless.

Dilute aqueous solution of merthiolate (1 to 5,000) seems ideal for the usage I have described. It exerts no devitalizing action in the wound and my results led me to believe that its mild antiseptic properties are of definite value under such circumstances.

OTHER USES FOR RIB CARTILAGE GRAFTS

In any deformity about the face where there is a defect of contour, due to depression or loss of the bony or cartilaginous framework, rib cartilage transplant offers an ideal means of reconstruction. The most common use is in the reconstruction of flat or saddle-nose deformity. It must be remembered, however, that an ill advised procedure may convert a deformity into a disconcerting monstrosity. The technical difficulty inherent in this as well as in all plastic surgical reconstruction can be surmounted only by perseverence and experience.

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FOR THE POSTGRADUATE PROGRAM
SEE PAGE XXXVIII

TRAUMATIC ANEURYSMS OF THE EXTREMITIES*

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Indianapolis

Although an injury to blood vessels which results in some type of aneurysm is relatively uncommon, it occurs often enough to warrant discussion of those problems which are peculiar to it. From that surgical practice which was considered proper before the refinement of blood vessel suturing technique, we get ligation in its various forms. These ligation operations are more generally applicable than blood vessel reconstruction but the chief influence which persists from the ligation period is the emphasis placed upon delay. Delay was sought because it permitted a more adequate collateral circulation to develop. As has been pointed out, the reconstruction and repair of blood vessels is not always successful, and frequently a good result depends upon thrombosis, a roundabout method of achieving the benefits of ligation. Aneurysmorrhaphy has an advantage in that one works inside the vessel and hence disturbs adjacent tissues, particularly the returning veins, to a lesser degree. This lessened trauma minimizes the risk of venous thrombosis and minimizes proportionately the risk of gangrene.

Arteriovenous aneurysm is quickly apparent. Venous thrill is felt within a few hours, and auscultation reveals a bruit. Swelling which becomes quite marked soon follows especially if the involved member is dependent. These signs alone identify arteriovenous aneurysm soon after an appropriate injury. The early picture is usually complicated by some degree of infection. This infection naturally influences the immediate treatment and the amount of infection may demand that immediate treatment be postponed. However, the site of the injury may make prolonged delay of great consequence. In the treatment of these wounds in the upper extremity, delay is less harmful than in the lower extremity. Certain locations favor this type of injury, and in other locations it cannot occur. It is wrong to lay down general rules governing this type of injury, and ignore entirely the injured part and its position. In the lower extremity the damage to the veins which results from having arterial pressure suddenly occur within them, plus the effect of being dependent, leads to definite and permanent disability.

The operation necessary to cure arteriovenous aneurysm cannot be stereotyped. Each case presents its own problems. Accurate apposition of the intima, usually with a mattress type of stitch, must be obtained. Also, the inclusion of shreds of adventitia must be avoided. The dressing may be very important. Undue pressure and especially constriction of the extremity is to be avoided. Some-

* Presented before the Section on Surgery of the Indiana State Medical Association at the annual session in South Bend, October 7, 1936.

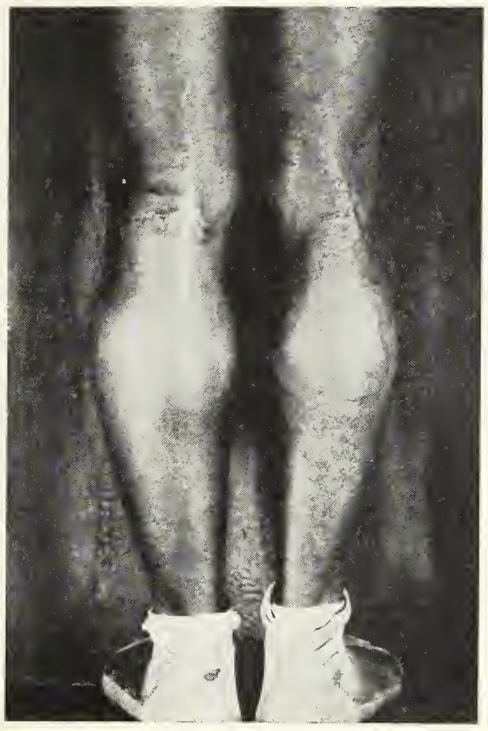


Figure 1. Arterio-venous aneurysm, three years following repair.

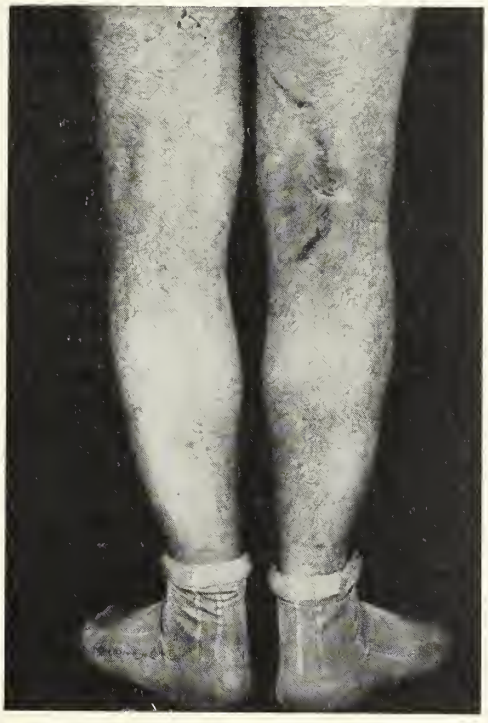


Figure 2. Arterio-venous popliteal aneurysm, two years following repair.

times splinting and elevation of the part are needed to prevent a bad result.

The records of two patients with popliteal arteriovenous aneurysm and of one patient with traumatic aneurysm of the brachial artery with associated brachial plexus injury are presented:

J. G., colored male, was shot through the left knee from behind, on August 11, 1932. The bullet passed through the popliteal space and shattered the patella and the medial condyle of the femur. He was seen on October 6, 1932, at the Indianapolis City Hospital. At that time there was a marked thrill over all the large veins in the left leg, marked swelling below the knee, and great dilation of the veins. He was operated upon October 10, 1932, through a vertical incision posteriorly; the arteriovenous aneurysm was dissected free. The sac between the artery and vein was opened with a tourniquet above and below. There was a small opening in the artery about half a centimeter in diameter which was closed with two layers of continuous mattress stitches, intima to intima. The opening of the vein was about a centimeter and a half long. This was closed with interrupted mattress stitches, and reinforced with four interrupted stitches. The tourniquets were removed, and there was no bleeding. The muscles and fascia were closed loosely with interrupted stitches. Dressings were applied very loosely and the leg was splinted and elevated. There was a distinct pulsation in the dorsalis pedis and posterior tibial arteries and the color of the foot was good. He was discharged on October 28, 1932, and was lost track of and not seen until September, 1935, at which time photographs were made. (Fig. 1.) There was only slight swelling of this left foot and leg, although his work requires him to be active and on the foot a great deal.

C. D., male, age 29, butcher, while scuffling with his wife, dropped a long, thin, narrow-bladed knife. The point struck the outside of the right calf. The handle fell outward and the blade was driven into the popliteal space transversely. He was admitted to the Indianapolis City Hospital October 28, 1933, three days after the accident, and at that time a thrill was felt and a bruit was heard. There was marked edema, some pain, and a low grade fever. He was treated by elevation of the leg and compression bandage and on November 4, 1933, was much improved. On November 9, 1933, an operation was done through a vertical incision, posteriorly. Dense scar was present although only two weeks intervened between the accident and repair. The opening in the artery involved about 2/5 its circumference. The vein opening was small, about ¼ inch in diameter. Both vessels were repaired with a continuous mattress stitch of fine silk. He was seen the following March and again in September, 1935, and at this time photographs were made. (Fig. 2.) There was only a trace of edema and the result was entirely satisfactory.

J. H., male, age 19, was first seen on December 4, 1934. He had been shot through the left shoulder with a 22 calibre bullet November 14, 1934. There were immediate signs of injury to the brachial vessels. The left arm was cyanotic and numb for twenty-four hours. In three or four days the arm was of normal color and appearance, but sensory and motor changes persisted. At the time of this examination there was no involvement of the triceps and biceps or of the extensors of the third, fourth and fifth fingers. There was slight ability to extend the wrist. There was no venous pulsation. Blood pressure 115/86, left; 105/75, right.

Conclusion: Injury to the brachial plexus involving the medial and ulnar trunks. Immediate signs point to injury of brachial artery or possibly vein. No evidence of arteriovenous aneurysm. The residual inflammatory changes contraindicate immediate attempts at repair.

January 8, 1935: There was marked atrophy of the hypothenar group. The thenar group showed little change. He used the thumb well. There was very slight ability to extend the wrist and no ability to flex it. There was atrophy of muscles on the ulnar side of the forearm and all sensation was gone from the fingers. There was sensation on the back of the hand in the radial area. He was unable to extend the elbow. There was good flexion of the elbow and the shoulder girdle was intact. There was a pulsating tender enlargement in the axilla.

On February 20, 1935, he came to the Indianapolis Methodist Hospital. He had begun to have pain in the left arm about three weeks before, and on admission and for a few days before the pain was excruciating and intolerable. At this time there was little noticeable difference in either motor or sensory changes since the last examination six weeks before.

February 23, 1935: Operation for traumatic aneurysm of left axillary artery and suture of brachial plexus trunks. Pre-operative diagnosis: Traumatic aneurysm of axillary artery, left; injury to the brachial plexus.

Operation: Incision below the clavicle. This was carried out over the shoulder and down the anterior surface of the arm. The pectoralis major muscle was severed about 1½ inches from the humerus, and the pectoralis minor was identified, but not severed. The aneurysmal sac was located in the second portion of the axillary artery. It bulged downward and medially from the vessel. The vessel was dissected out above and below the sac and non-crushing, bulldog clamps were applied. The medial trunk was adherent to the sac and there was a thinned area with a false neuroma above and below the thinned-out place. The ulnar branch had a similar defect, but it was more marked. The aneurysmal sac was opened—found to contain layers of fibrin. The axillary artery was found to be buttonholed and enough of the artery wall was involved to make repair impossible. The artery

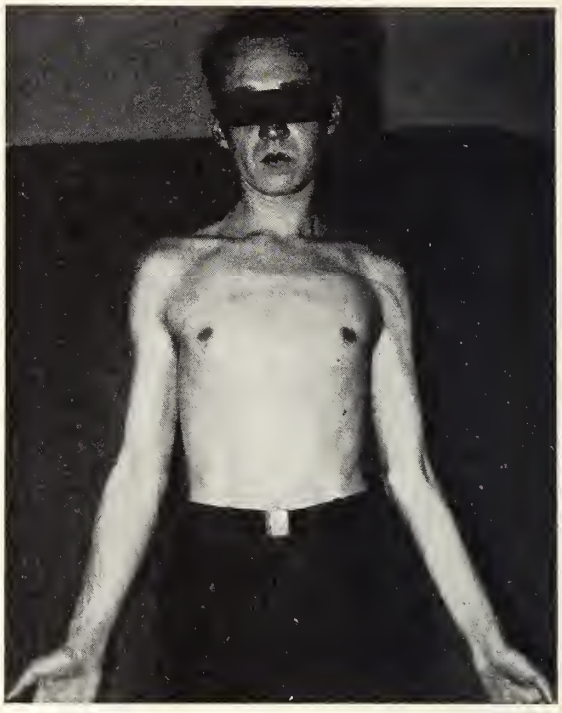


Figure 3. Traumatic aneurysm of the brachial artery with associated injury to the brachial plexus, eleven months after injury and eight months after repair.

was sewed from the inside of the sac with arterial silk. A ligature was placed distal to the sac, but right against it. In this way neither the suture nor the ligature interfered with any of the axillary branches of this vessel. The hand was inspected and found to be warm, but pulseless. Both the ulnar branch and the medial branch of the brachial plexus were severed. A portion of the false neuromas and the defects in the nerves were excised in both branches. Both branches were then united with very fine silk. These nerve defects were at a level about one-half inch below the point where the inner trunk of the median branch entered that nerve. The pectoralis major was reunited with chromic catgut, mattressed stitches. Skin closed with silk. One Penrose drain placed. Arm dressed in abduction, cock-up splint for the wrist to be applied later.

Postoperative diagnosis: Bullet wound which had produced traumatic aneurysm of the axillary artery and lesion of the ulnar and medial heads of the brachial plexus.

Operative note: A plaster shell was used to support the entire arm with a cock-up splint for the wrist. We were unable to provide for electrical stimulation at his home and massage and passive movement were depended upon to maintain muscle tone as well as possible.

In three months he could bend his elbow. In seven months he could use his fingers and on October 3, 1935 (8 months postoperative) (Fig. 3),

the carpal flexors and extensors were beginning to function. There was some edema of the hand. There was marked atrophy below the elbow but all these muscles are beginning to show improvement.

September 19, 1936: He had excellent use of the elbow but not much more return of function to the hand. There was good range of movement in the wrist but it was not strong. Marked atrophy of the forearm and hand persisted but there had been a return of sensation and there was some flexion of the fingers.

DISCUSSION

R. N. Bills, M.D., Gary: The point I am especially interested in is that in these arteriovenous aneurysms there is a time when they decrease in size. Sometimes an arteriovenous aneurysm is overlooked. I think the paper covers very carefully an exceedingly interesting group of cases, the main points in the operative procedure where he advocated surgery, and the references to the literature. The only thing that occurs to me is the time at which the cases are taken care of. If the diagnosis of injury to the blood vessel is made early and the injury repaired, the patient is relieved of the danger of arteriovenous aneurysm or the ordinary type of traumatic aneurysm in which the artery alone is involved. In cases where there is the deveolpment of a false aneurysm, the cases are often mistaken for a sacculating aneurysm. Personally, I am of the opinion that an earlier attempt at repair is the big problem.

202 Hume Mansur Bldg.

ABSTRACT

R. A. Vonderlehr, M.D., *Public Health Reports*, Vol. 52, January 22, 1937, No. 4, p. 103, concludes a paper on "Recent Extension of Venereal Disease Control Work Through the Provisions of tbe Social Security Act" as follows:

The evidence which has been accumulated in this report indicates an urgent need for the adoption of the following measures in the campaign against syphilis and gonorrhea in this country:

1. The appointment of a full-time venereal disease control officer in every state department of health.
2. A much more liberal policy with regard to the free distribution of antisyphilitic drugs.
3. More general use of the dark-field examination, either direct or delayed, in the diagnosis of early syphilis.
4. More widespread use of epidemiologic investigations in the control of syphilis.
5. Greater persistence on the part of health officers in the attempt to obtain reliable morbidity and mortality reports.
6. The development of more and better facilities for diagnosis and treatment.
7. The adoption of reasonable standards of efficiency by state health departments before formal recognition is given to clinics for the treatment of syphilis and gonorrhea.
8. A much more liberal allotment of funds for direct expenditures in the control of the venereal diseases.

CEREBROSPINAL RHINORRHEA*

REPORT OF AN UNUSUAL CASE

HERBERT C. WURSTER, M.D.
Mishawaka

It may be proper and perhaps it is timely to give the subject of cerebrospinal rhinorrhea some attention. This conclusion is reached after seeing a patient with cerebrospinal rhinorrhea who had consulted five different ear, nose and throat specialists over a period of four years and seven months. None apparently diagnosed the condition correctly, for the patient never had been told of it, and had been subjected to unnecessary treatment such as submucous resection of the nasal septum, turbinectomy, cauterizations and prolonged local nasal treatments, all without avail.

Most text books in rhinology either do not mention the subject of cerebrospinal rhinorrhea or it is mentioned only briefly. Cerebrospinal rhinorrhea is a discharge of cerebrospinal fluid through the nose. The condition was recognized and described by Thomas Willis in 1676, Morgagni described a case in 1762, and Charles Miller reported one in 1826. Many cases have been regarded as nasal hydrorrhea from which cerebrospinal rhinorrhea should be differentiated. Not a large number of cases have been reported either in this country or abroad, but the condition has assumed a definite entity, even though rare in its occurrence. The fluid which escapes into the nose is clear and watery in contrast to the slightly opalescent and more viscid fluid of nasal hydrorrhea. The dripping is constant and is free from taste, sediment, odor, albumin and mucus. It usually drops from one side of the nose only, whereas with nasal hydrorrhea, the dripping is from both sides.

The diagnosis in such cases rests on an analysis of the fluid, depending chiefly on the following findings: low specific gravity (about 1.007 to 1.008); the presence of reducing substance, and absence of mucin.

In analyzing the reported cases, it appears that cerebrospinal rhinorrhea may occur spontaneously by leakage through the cribriform plate of the ethmoid bone into one nasal chamber, from which it is discharged in drops, or it may be caused by trauma, including intra-nasal surgery.

Prof. J. Wagner Jauregg[1] recently suggested that sneezing stimulated by snuff sometimes serves to increase the patency of the microscopic openings in the cribriform plate of the ethmoid bone, allowing better communication between the interior of the skull and the cavity of the nose. He states that an eruption of cerebrospinal fluid occasionally occurs in sufficient amount even to relieve intracranial pressure and many habitual headaches

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* Presented before the Section on Ophthalmology and Otolaryngology of the Indiana State Medical Association at the South Bend session, October 7, 1936.

[1] Jauregg, J. Wagner: Something About Sneezing. *Wiener Medizinische Wochenschrift*. 1, 1936.

owing to meningitic processes; however, this does not include migraine.

Bishop[2] in his book states that L. Hektoen has reported a case in which C. Fenger removed what appeared to be a nasal polyp, but which proved later to be a portion of a meningocele. An opening was made in the face and the edges of the dura sutured. Bishop states that Hektoen thinks the route of escape of the fluid is along the perineural sheaths of the olfactory nerves. In the cases occuring spontaneously, one wonders how often increased intra-cranial pressure might be a factor.

CASE REPORT

Treatment and prognosis will be discussed along with the following case report.

A single woman, M. B., aged twenty-nine years, in apparent robust health, suggestive in appearance of a hypothyroid type, residing in a very small, distant town, was seen first in November, 1931. Her chief and only complaint was referable to her nose, namely, a constant discharge of a clear, watery fluid from the right side of her nose, quite evident when leaning her head slightly forward. She stated that when she lay down, she could feel the fluid trickle into her throat. At night when she retired, it was necessary for her to place a large towel under her nose in order to protect the bed clothing. She insisted that she had no other complaints but that she was quite annoyed and embarrassed, as the fluid dripped from her nose onto her clothes and into her food.

The onset of the condition occurred in February, 1927, at which time she apparently had an acute upper respiratory infection involving her nose (sinuses) and throat, but without any headache. After about one week with this condition she became very uncomfortable in that her nose was obstructed completely. In order to relieve this somewhat, she blew her nose very hard and immediately felt something "give away," and then noticed the dropping of clear fluid from the right side of her nose. In about two weeks, at which time her general condition was much improved, she consulted an ear, nose and throat specialist in a nearby city. He advised a submucous resection of the nasal septum and told her it not only would benefit her nasal condition, but also would stop the discharge of fluid. Several days later she submitted to this operation. One week following the operation, the discharge of fluid ceased, and for eight weeks, or up to May, 1927, there was no discharge and apparently no ill effect; then the discharge again appeared suddenly and without any apparent cause or reason so far as she knew. She stated that previous to her original trouble, her nasal breathing was free and that she was not subject to frequent, severe or prolonged colds.

Seeing and believing what she thought was partial results—a temporary stopping of the discharge —from the first operation, she submitted to a second operation on May 5, 1927, by the same physician. Again she was assured that it would surely stop her trouble. The right middle turbinate apparently was removed at this time. This was followed by prolonged local nose treatments, and still the nasal discharge on the right side continued as markedly as before.

Determined to get relief from this troublesome but painless condition, she visited another ear, nose and throat specialist in the same city. This was in September, 1927. For several months, violet-ray treatments were used locally in the nose. She stated that she was quite impressed with this form of treatment, but since the physician admitted he did not know exactly what the condition was, and since she got no results, she discontinued the treatments.

In the spring of 1928, about one year from the onset of her trouble, she visited a third specialist in a different town. He, too, promised results with treatment and pretended to know the cause of her condition but would not tell her. Tampons of argyrol solution apparently were used in the nose, and they were allowed to remain in the nose for one hour at a time. These treatments were given twice a week for two and one-half months, and again there were no beneficial results, so she gave up temporarily in despair.

However, the urge for relief became too great, so in the fall of 1928, she visited a prominent specialist in still another city. He sent her to a hospital for study, and after several days dismissed her, telling her he did not know the exact cause of her condition. He advised her to return to his office on a certain date, which she did, and thereupon learned that the doctor was on a vacation. She had received very little satisfaction and no encouragement, so she did not return.

Again she remained untreated. In the spring of 1930, without any apparent cause or reason, the watery discharge ceased for a period of seven weeks and then recurred just as before.

In 1931 she returned to the same city in which her first operation was performed, but this time visited still another specialist. He gave her considerable encouragement, but would not commit himself as to the cause or mechanism of her condition. He treated her from March until June of the same year. The patient stated that he "burned her nose with acid."

Again she gave up treatments; then in November, 1931, she came to my office for advice and treatment. A tentative diagnosis of cerebrospinal rhinorrhea was made and she was told that a careful examination of the fluid was necessary for a confirmation of the diagnosis. She promised to return but, due to sickness in her home, she did not return until February 2, 1932, at which time she brought with her a bottle containing four or five ounces of the fluid which she had collected the night before. I collected an additional specimen in the office and had both specimens examined at

[2] Bishop, Seth Scott: Diseases of the Nose, Throat, and Ear. —Third Edition. F. A. Davis Co., pp. 27 and 28.

once by a competent pathologist who later reported that it was cerebrospinal fluid.

Concerning the details of the specific condition, the patient stated that the time of day, season, period of the month, nor any other thing made any difference in the rate of flow of the discharge, except that when she had a cold or when she coughed, it seemed to accelerate temporarily the rate of flow. In April, 1932, the rate of flow was about six or seven drops per minute. She stated that for months at a time, earlier in the course of this condition, the rate of flow was more often nine to twelve drops per minute. She informed me that she had timed it at daily intervals for weeks.

Her past history may be summarized in saying that when one and one-half years of age she had measles. In June and July of 1927, five to six months after the onset of cerebrospinal rhinorrhea, she had broncho-pneumonia and her recovery was good. She denies any other sickness, likewise denies having had any injuries or operations previous to the onset of this condition. She never had frequent colds or headaches or post-nasal discharge. She always has been able to work hard. A detailed inquiry concerning any possible other symptoms revealed none. She lived on the outskirts of a small town on a farm and worked hard. She did the usual chores and duties of a farm household. Every evening, even while she had this condition, she milked eight cows and frankly admitted that she could do more work than the average farm woman and yet enjoy it. The family history was irrelevant. Her father is living and well. Her mother died in 1911, cause unknown. She had one brother and seven sisters, all living and well.

The physical examination, except for the nasal findings, were of no great significance. The patient was a white female, aged twenty-nine years when first seen, unmarried, mentally alert and of a jovial disposition. She was the robust, phlegmatic type of individual, however, suggestive of hypothyroidism. She was five feet four inches tall, very large-framed, and weighed 190 pounds.

The nose showed evidence that a partial submucous resection had been done. There was high deviation remaining on the right side posteriorly. Both middle turbinates appeared to have been removed; only small stubs remained. No pus or mucus was seen. By a careful examination, a clear, watery discharge was seen trickling down from the posterior ethmoid region on the right side. No pulsation was seen. A small amount of granulation tissue was present superiorly to the middle turbinate stub on the right side. The rate of discharge at the time of first examination was seven drops per minute.

As to treatment, it promised little. The patient was given advice chiefly. The condition was explained to the patient and she was advised that there should be a strict avoidance of all intranasal manipulations, that she should not blow her nose violently, that she should avoid the use of a nasal douche or atomizer and that she should respect a beginning cold. With the first indications of a cold, she was advised to go to bed and lie in a semi-recumbent position. A prescription for a twenty-five per cent solution of mild silver protein was given her, to be dropped into her nose several times daily upon the first signs of a cold and to be obtained fresh before use.

The prognosis in any case is usually doubtful, as perhaps time only will tell. If there is increased intra-cranial pressure from a brain tumor, or some other obscure pathological condition, it is evident that the outlook is not so good. Much could depend upon the closure of the fistula with granulation tissue so that ascending infection and meningitis may not develop.

The patient has been under my surveillance since 1931. On August 12, 1934, while working, the discharge ceased suddenly and entirely as far as one can detect and has not recurred to the present date. The patient is in excellent health. Intranasal examination reveals no structural change such as granulation tissue, etc.

COMMENT

The interesting features of this case are:

(1) The only apparent causative factors present in this case were acute nasal infection plus violent blowing of the nose. This deduction is, of course, based on the history. However, I am inclined to rely upon the patient's history of blowing her nose severely as she is not the boasting type of individual.

If one wished to speculate that the patient is a sub-thyroid type, then theoretically thyroid extract treatment should be helpful if the etiology of her condition was due to an excess formation of the secretion, as the rapidity of formation of it is diminished apparently by thyroid extract and increased by pituitary extract, according to the work of Weed and Cushing[3] and others. It is with regret that thyroid extract was not given; at least it is offered as a suggestion for future consideration in cases of non-traumatic origin.

(2) The length of time during which the cerebrospinal fluid has discharged from the nose. Drs. Bulson[4] described a case in which following middle turbinectomy by another physician, the patient had discharged spinal fluid for over five years. They stated at that time, so far as they could learn, no previous case had been reported in the literature with a discharge of that duration. The discharge in the case which I have had was of six years and seven months duration.

(3) The large quantity of cerebrospinal fluid that was lost at times. As stated previously, the rate of flow at her first visit to me, November, 1931,

[3] Weed and Cushing: *American Journal of Physiology*, 36, 77, 1915; also Frazier and Peet, ibid, 36, 464, 1915.

[4] Bulson, Albert E. and Eugene L.: Cerebrospinal Rhinorrhea Following Intranasal Surgery. *The Journal of the American Medical Association*, Dec. 21, 1929, Vol. 93, pp. 1969 and 1970.

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APRIL, 1937

EDITORIALS

MAY DAY — CHILD HEALTH DAY

For many years May Day as Child Health Day has been observed in Indiana in accordance with the Congressional Resolution of May 18, 1928. Within the next few weeks proclamations will be issued by the President of the United States, and by the Governor of Indiana, designating Saturday, May first, as Child Health Day.

In the former observances of this day, the fiesta aspect or the Maypole idea prevailed in the celebration of the day's program. This was followed in a few years by a marked tendency on the part of many to commercialize the day for personal or business exploitation. In the past few years, May Day has rapidly expanded in meaning and in forms of expression. May Day in 1937 is to be celebrated as a day calling the attention of every parent, doctor, and welfare worker to the right of every child to a joyous living and a positive health program.

Since the enactment of the Indiana Public Health Act and the State Welfare Act on March 16, 1936, by the Special Session of the Indiana State Legislature, improvement and extension of health services to all children have been made through cooperation with the Indiana State Medical Association, the Indiana State Nursing Association, and the Indiana State Tuberculosis Association. The chief objective of all of these combined forces has been to promote year-around child health services in every community, including services for physically handicapped children. These health services are made available through several sources such as maternal and child health services, services for crippled children, child welfare services, and State and Federal grants for aid to dependent children.

Since the enlargement of this program, the officers of the Indiana State Medical Association have followed its developments and operations with great interest, and have cooperated with the various departments in formulating and in approving plans for carrying out these services to the best interests of the mothers and children of the State, and to preserve the rights of organized medicine to be the leader in carrying forth health services to mothers and children of Indiana. It may likewise be stated that the administrators of the State dealing with child and maternal health and child welfare have in turn cooperated with the Indiana State Medical Association in planning any demonstration services. This has been accomplished through liaison committees and constant cooperation between departmental heads and the executive committee of the Indiana State Medical Association.

With this close relationship established, the 1937 program for May Day has for its slogan: "Health Protection for Every Child," and this will be fulfilled. Elsewhere in THE JOURNAL appears a detailed outline for carrying out the 1937 May Day program through the county medical societies. This has been submitted by the State Chairman for Child Health Day. The State Department of Education is also cooperating in the celebration of this day by planning and directing programs, plays, health exhibits, poster contests, festivals, and safety programs in the schools throughout the State.

AGAIN, THE TONSIL

This grossly abused, greatly maligned and much misunderstood little organ of the human anatomy seems once more to have the spot-light of medical publicity, this time because of much discussion as to the wisdom of attacking it via the route of the electric cautery. The opponents of this method seem to have an advantage over its proponents at the present time; the opponents have advanced the plausible argument that the rape of the tonsil should be entirely discontinued.

It is difficult to subscribe to the belief that, once a tonsil is discovered, immediate steps should be taken to remove it from its seat. Of course there are some tonsils that should be enucleated, but enucleation is a far cry from the electro-coagulation method. If tonsil tissue is responsible for definite pathologic symptoms, then remove the tonsil; do not temporarily seal up its crypts by electro-coagulation. Current medical literature teems with arguments in favor of this opinion, and patients who have been operated upon by this "new" method, as observed by us, further bear out our contentions. Complete eradication of a "sore spot" in the flesh certainly is a thing to be desired. Most physicians who once essayed this

coagulation method, probably because it was deemed an office procedure, have discarded it and have returned to enucleation as the operation of choice.

Let's leave this new-fangled method of treating infected tonsil tissue to the electro-therapeutists of which cult Indiana seems to have more than her share. In almost every sizable Indiana community, one or more drugless practitioners are dallying with the cautery in such cases. They are grossly exceeding their licensure, for the amendment of 1927 certainly confers no such right on these licentiates, the greater per cent of whom are chiropractors. Just why this practice is countenanced in Indiana is a long story, a story familiar to most of our readers. The answer can be condensed by stating that the 1897 basic medical law made scant provision for enforcement. The 1927 amendment added a few teeth to the law, but did not provide ample funds for the Indiana State Board of Medical Registration and Examination to enforce the law.

It probably is no exaggeration to say that by far the greater portion of electro-coagulation tonsil operations performed in Indiana are done so illegally and are done by those who are not properly trained, either in diagnostic ability or in technique. Sooner or later the Hoosier public will demand that something be done about it, and until that time we suggest that this field be left to those who are at present capitalizing upon it.

POST FLOOD-DISASTER OBSERVATIONS

The March issue of The Journal contained two important articles concerning the January-February flood situation in southern Indiana. These were from the pens of Secretary Hendricks and Dr. Verne K. Harvey, Director of the Indiana Division of Public Health. It was a little unfortunate that these articles were published in a special number of our magazine, a number devoted to one of the most important medical problems confronting our people today. It was unfortunate because the flood situation and the activities of Hoosier medical men during that period deserved a special number of The Journal alone.

Indiana physicians ever have been on the alert. They always have faced emergencies with a preparedness that sometimes has seemed uncanny. We have come in for a well-deserved lot of praise for the work done in flood relief. When a writer of the Westbrook Pegler type takes time out to openly compliment the medical profession of Indiana for its work during the flood disaster, that *is* news. Other newspaper writers were pleasingly generous in their commendatory remarks.

We must say "Hats off!" to Verne Harvey, a young man, well grounded in public health work, who had never before faced such an extreme emergency, but who literally "moved in" on the flood district and remained there until there was no further need for his services. Dr. Herman Baker, president-elect of our Association, seeing that the flood waters were mounting the steps of his Evansville home, hastily evacuated his family then gave his whole time to the local Red Cross unit with which he remained until the end of the emergency. Secretary Tom Hendricks traveled hundreds of miles over the flooded area, seeking points where medical services were inadequate; he found none.

County medical societies over the state were contacted and advised to be prepared for any emergency. Practically all responded with the information that a very few hours notice would be all that was necessary for them to have aid on the way to southern Indiana. Many of these societies made liberal contributions of money and supplies and promised more if occasion demanded. Colleagues in the southern tiers of Indiana counties arose to action as one man and many of them did not even remove their clothing for weeks; rest was only a matter of a few moments between calls for help. The Journal carried pictures of this phase of the disaster.

We believe it was General Sherman to whom is ascribed the phrase "War is hell." We cannot find words to describe the 1937 flood conditions in the Ohio Valley. We are only certain that when the history of the flood is written, Indiana medical men will come in for their just share of the tales of heroism which always follow any great disaster.

Again we say that we are inordinately proud of Indiana medicine.

CHAIN STORES

For several months some of our members have occasionally received cards which offer physicians registered in Indiana a guarantee of a weekly wage of varying sums for their services. The first card that came to our notice stated that the physician would be guaranteed twenty-five dollars per week, with commissions. Later the cards, mailed from Chicago and from various points in northern Indiana, raised the ante to as much as forty dollars, with the commission bait still appended.

Recent events disclose that the cards were sent out by a chain store optical outfit which has a few stores in Indiana and apparently desired to increase the number. They apparently have had no little trouble in establishing themselves and the scheme above mentioned was devised to overcome the difficulties.

An Indiana doctor who fell for the scheme betook himself to an Indiana city in answer to one of the cards. He was told that his duties would consist of making "manifest" refractions, or refractions in which no cycloplegic is used, and that he

would receive a stated sum for each refraction. It was further suggested that the lease for the offices should be taken out in his name! The doctor worked at the place for a very short time, though he admitted to us that his training as a refractionist was limited to some work done when he was a medical student, many years previously. However, the city in which the store was located has a very active Better Business Bureau, and a newspaper which is more than a little curious about its advertisers, so the newspaper folk sent a reporter over to have his eyes examined, and the Better Business Bureau entered the fray and altogether they made things most unpleasant for the newly-fledged refractionist. By way of making matters more complex, a representative of the Indiana State Board of Medical Registration and Examination got on the job and offered some gratuitous advice to the effect that the Indiana courts had held that a licensed physician who lent his professional self to an unlicensed practitioner might find his Indiana standing in jeopardy. The budding refractionist immediately returned to his native heath and was fully convinced that he was definitely through with such a game.

There is more to the story—and it would make a story that would be worth reading if the proper authorities took hold of the matter and made a rigid investigation.

This is not the first time that an effort has been made to make a definite contact between optical shops and registered physicians. Some fifteen years ago, we had at least two such attempts, each of which occupied the attention of the State Board of Medical Registration and Examination for a considerable period, but neither of which unholy alliances was consummated.

We suggest that all members who receive these postal cards give answer thereto, mailing the card and the answer to headquarters. They might make interesting reading!

The other side of the story is patent. What physician in good standing would sell his professional soul for a mere pittance? Not more than a decade ago, we found a dozen or more Indiana registered physicians sitting smugly in a back room of a "men's medical specialist" outfit, doing little more than to hang their diplomas and county licenses in conspicuous places about the office whilst "Studebaker"—the unlicensed come-on artist, plied his trade on the unwary. The usual weekly wage for the physicians was twenty-five to thirty dollars, and one man from southern Indiana who went to work in such a place in Gary stated that his weekly salary was fifteen dollars.

Of such stuff is a profession made. The great majority of our group are self-respecting, respectable men and women. A few, usually because of failure to succeed in their chosen profession, fall for the blandishments of the quack and the irregular.

EDITORIAL NOTES

There were 131 attendance registrations and 120 dinner reservations for the annual Secretaries' Conference at the Columbia Club in Indianapolis, March 21. This conference was undoubtedly the best one that has been held. Dr. A. M. Mitchell, of Terre Haute, was re-elected as chairman of the Secretaries' Conference Committee.

In Mr. M. E. Hays' talk before the secretaries at the annual Secretaries' Conference in Indianapolis, March twenty-first, he mentioned the fact that 5,000 Indiana families are at present being aided by the Resettlement Administration. Of these, 1,000 families have sought help as a result of the Ohio River flood.

Dr. Verne K. Harvey, director of the Indiana State Board of Health, has ordered one thousand reprints of all the original articles appearing in the March issue of The Journal—the Venereal Disease Control issue. If any physician is desirous of obtaining a copy, Dr. Harvey will be glad to supply it.

Among the comments received relative to the special March number of The Journal is the following from Thomas Parran, M.D., Surgeon General of the United States Public Service: "I do want to express my personal appreciation to you and to your colleagues of the Indiana State Medical Association for the splendid cooperation of your Association in the control of syphilis, of which the March Journal is an outstanding example."

The rule which prohibits publication of more than one original article from a member in any one volume of The Journal is waived in favor of those members who contributed articles to the March issue—the Venereal Disease Control Number. All of those articles were prepared by invitation and as a small mark of appreciation for their aid in getting out what is generally regarded as one of the best numbers of The Journal, the rule is set aside for those authors.

Is the public interested in promoting health and preventing disease? In its recent campaign, the Women's Field Army for the American Society for the Control of Cancer solicited space in various publications and nearly three hundred magazines with a total circulation of 24,057,377 donated space for the cause. With such cooperation, the first

national campaign should succeed in making the message of the Women's Field Army known from coast to coast.

The names on the rolls of the Social Security accounts once more prove that the Smiths are numerical leaders. Preliminary estimates of the Social Security Board indicated that ten names—Smith, Johnson, Brown, Williams, Jones, Miller, Davis, Anderson, Wilson and Taylor—will constitute more than 1,500,000 of the total number of workers who will participate in the Federal old-age benefits program. Accounts are set up for approximately 294,000 Smiths, 227,000 Johnsons, and 164,000 Browns. Estimates are based on the assumption that approximately 26,000,000 wage earners will participate in the old-age benefits program.

A newspaper clipping tells of the anniversary dinner for a physician who has completed his fiftieth year of practice. The flowery words of praise may have pleased him and his townsmen, but we cannot help wondering just how much real pleasure the physician had from that celebration, for it was in honor of one of those quackish practitioners whom it has pleased Rex Beach to publicize in the pages of a national monthly lay magazine. The lengthy program contains the names of notables in abundance, but the name of even one physician-colleague is conspicuously absent. Somehow there is sadness in this account of an anniversary celebration for a physician who has exploited his good training and skill in such a manner that he has no physician-friends to help him celebrate.

Already the "early birds" are making reservations for the French Lick meeting of our Association, October 4, 5, and 6. While the accommodations at the French Lick Springs Hotel seem ample, early registrants are assured of the most comfortable and best located rooms in that famous hostelry. Early indications are that all records for attendance at a southern Indiana meeting will be eclipsed; thus if you want a choice room, make your reservation now. The "foot-hills of the Cumberlands," ever beautiful, take on added attractiveness with the coming of October; the golf courses reach their best form at that time; hiking or even short strolls afford more pleasure than at any other season. Then, too, Tom Taggart and his helpers are even now planning to extend to Hoosier medics such a welcome as is seldom accorded French Lick guests. Better make that reservation while you think about it. Address your communication to the French Lick Springs Hotel.

Pierce MacKenzie, a member of our editorial board, has a peeve, and he wants Indiana doctors to know about it. Some scoundrel poisoned the MacKenzie "Scotty," and Pierce tells about the reprehensible act in one of the editorial notes in this issue, using language that leaves no doubt concerning his feelings in the matter. We are wholly in accord with Pierce on this thing. Since early boyhood days, we've had dogs, and looked upon them as pals — all sorts and sizes of dogs, most of them of unknown parentage. Last June we had cremated the remains of one Bim who had lived as a part of the family for fifteen years and two weeks, and when Bim went to wherever it is that good dogs go when they leave this sphere, we went into mourning for a whole week, then wended our way up to "Orphans of the Storm" and brought Jerry home. Yes, we can appreciate Dr. MacKenzie's feelings, and we are happy to learn that medical science triumphed and that his Scotty soon will be digging holes in the prize tulip beds of the MacKenzie (or some other) lawn.

In the passing of Dr. Isaac N. Trent, of Muncie, Indiana loses a notable figure, a man who was the epitome of all that is best in the profession of medicine. He was one of the few remaining general practitioners of the generation of "family doctors." As chairman of the Delaware-Blackford County Medical Society necrology committee, Dr. Hugh A. Cowing has paid a beautiful tribute to Dr. Trent's memory. He points out that Dr. Trent carried on an active professional career in Muncie for almost a half century, and among the notable points in his long years of practice was his activity during a smallpox epidemic in his home city in 1893. He is credited with having administered the first dose of diphtheria antitoxin that was used in Delaware County. For years Dr. Trent was called the nestor of his local medical group. He represented his community in the Indiana legislature, in both the House and the Senate, and in this capacity he made many friends for medicine because of his upright bearing in all his legislative duties. We regard it as a pleasure to have known this man over the years, and his passing causes deep regret among his fellows.

Ten dollars is no little sum to throw away. Yet that is the least amount that commercial directory publishers charge for including a physician's name in a book which the publishers say will be used by insurance companies and others in selecting physicians to do their work. Indiana physicians just now are being flooded with letters of solicitation and application blanks from a midwestern company which proposes to issue such a directory. In spite of the fact that reputable medical organizations give no endorsement to such enterprises, some

physicians are gullible enough to part with their hard-earned money, and the promoters continue to collect and profit. It is doubtful whether any physician in the list secures enough referred work through the directory to repay him for the amount invested in the book. It is our belief that if reputable insurance companies, most of which are wealthy organizations, felt any need for a list of physicians other than the very complete directory published by the American Medical Association, they would compile such data as suited their requirements without cost to the physician and without the aid of commercial companies which exist upon the profits of such enterprises. The ten or more dollars required to secure a listing in such a directory (your name will not be included unless you promise to buy a copy of the directory) will afford you infinitely greater profit if invested in a recent medical textbook. Ten dollars is a lot of money to throw away!

We cannot resist reprinting the following comment from *Time* magazine for March 22, 1937:

"After assisting a babe into the world, U. S. doctors customarily see to it that a few drops of silver nitrate are dropped into the infant's eyes to prevent blindness from venereal infection. In 20 states such prophylaxis is required by law. In eleven more it is mandatory under certain conditions. In Washington last week the District of Columbia Committee of the House of Representatives had before it a bill to require in the District eye prophylaxis at birth. The bill carried a Senate amendment which was so full of religious implications that a subcommittee had to be appointed to deal with it. The amendment read: 'The provisions of this section shall not be construed to apply to persons treating human ailments by prayer or spiritual means as an exercise or enjoyment of religious freedom.'

"The chief U. S. church which treats human ailments by prayer is the Church of Christ, Scientist. Having failed last year to kill a similar prophylaxis bill in its home state, Massachusetts, the church had lobbied for the Senate amendment and sent its Washington one-man committee on publications, William G. Biederman, to the House subcommittee hearing last week to see that it stuck. Committeeman Biederman argued Christian Science's case on broad constitutional grounds while physicians and welfare workers simply held out for silver nitrate on its own merits. Said District Health Officer Dr. George C. Ruhland: 'I have the highest regard for religion, but religious belief does not prevent blindness.' Representative Virginia Ellis Jenckes, of Indiana, tried to soothe Committeeman Biederman's agitated scruples by suggesting that eye treatment was very little different from giving baby a bath. Soothed or not, the district subcommittee upheld medical science over Christian Science, recommended that the Senate amendment be stricken from the bill."

The person who poisons dogs is a louse. He would put croton oil in a baby's candy; he would trip his grandmother on an icy sidewalk; he would go to church on Sunday and swindle his partner on Monday. In the words for popular songs, he's the Ohio River on a tear, he's the wind in Kansas, he's the earthquake in Guatemala, he's the revolution in Spain. And in other words, he's a pole-cat. Periodically, some such fiend starts out as a self-appointed Attila to rid his town of dogs by poisoning them, and he has no regard for which or whose dog gets the poison. The dog that gets a good dose of strychnine usually isn't lucky enough to get home for help. Recently our Scottish terrier, who seems to think the grass is greener or at least more interesting in someone else's yard, got a good dose of strychnine. His side-kick, a big white collie, apparently got a similar dose, and didn't live long enough to get home. Scotty was doing his best to crawl over the street curbing near his home when a good samaritan, recognizing his distress, picked him up and took him to the veterinarian who happened to have his office close by. The dog was just going into his first convulsion when the veterinarian took him. Fortunately, a human being does not often get strychnine poisoning, but once in a while a baby eats some carelessly placed tonic pills or an older person, by intent or accident, gets a poisonous amount. What happened to Scotty may be of interest for his treatment would apply to such a person. Upon arrival at the office, he was given six grains of nembutal intravenously. A tube was put into his stomach and, after washing it out, a tannic acid solution was left in. A colonic flushing was given. He was kept warm with blankets. He was kept completely relaxed with nembutal and a generous amount of salt solution and glucose was given while he was unconscious. For four days he was unconscious. On the fifth day he was able to stand, and on the tenth day he was back on duty, seeing three youngsters safely to and from school, protecting and comforting the black Persian cat, and barking the other neighborhood dogs, the rag-pickers and the gig-a-boos off his domain.

The annual post graduate course of the Indiana University School of Medicine and the Indiana State Medical Association will be presented in Indianapolis, May 10 to 14, 1937. The schedule for this year (see advertising page xxxviii) includes speakers and subjects that will interest every physician in Indiana, and the opportunity afforded is one that should not be neglected. There will be clinics, lectures, panel discussions, practical demonstrations, and clinical-pathological conferences during the hours from eight o'clock in the morning until five o'clock in the afternoon. Evening guest speakers include Dr. Samuel A. Levine, of Boston, assistant professor of medicine in the Harvard University Medical School, the author of a recent and popular textbook on cardiac diseases, who will

be the speaker on Monday evening, May tenth. The following evening, May eleventh, Dr. Vernon C. David, of Chicago, clinical professor of surgery in Rush Medical College, will talk. On Wednesday evening, Dr. Frank Mann, of Rochester, Minnesota, professor of pathology, surgery, and experimental physiology in the University of Minnesota, Graduate School of Medicine, will be the speaker. Dr. Mann is well known in Indiana and has maintained membership in the Marion County Medical Society for twenty years. Dr. Nicholas J. Eastman, of Baltimore, professor of obstetrics in Johns Hopkins University School of Medicine, and a former Indianapolis resident, will share the Wednesday evening hours with Dr. Mann. Thursday evening, May thirteenth, the guest speaker will be Dr. Harold N. Cole, of Cleveland, associate clinical professor of dermatology and syphilology in Western Reserve University School of Medicine. A new feature of this year's postgraduate program will be the Friday evening meeting, May fourteenth, which meeting will be open to the public. Professor Maude Slye, associate professor of pathology, University of Chicago, whose research work upon cancer in mice has attracted a great deal of attention both in the profession and in the lay press, will be the speaker. The preceding brief outline is sufficient to make any progressive physician want to be in Indianapolis May tenth to fourteenth. There will be no registration fee. Can you afford to miss it?

At the mid-winter meeting of the Council, a resolution was adopted which was, in part, as follows: " . . . It is the opinion of the Council that health activities of the government, except those concerned with the military establishments, should not be subservient to any other departmental interests. . . . It is also the view of the Council that the supervision and direction of such medical or health department should be in the hands of a competently trained physician, experienced in executive administration." The complete resolution was sent to Mrs. Virginia E. Jenckes, representative from the Sixth Indiana Congressional District. Under the date of March 2, 1937, Mrs. Jenckes advised the headquarters office that not only did she favor the resolution, but that she had forwarded it to President Roosevelt and had received from his office the following reply:

February 16, 1937.

My dear Mrs. Jenckes:

The President has asked me to reply to your letter of February second, transmitting a copy of the Resolution passed by the Indiana State Medical Association concerning the proposed reorganization of the executive functions of the government.

The President wishes me to assure you that any reorganization of this branch of the Federal service will be designed to promote and increase the efficiency of the Federal public health and medical services.

The Public Health Service is now the central Federal health agency, organized as a bureau in the Treasury Department. The head of this Service has always been a medical officer and no change in this policy is contemplated. In any reorganization, it is expected that the Public Health Service will continue to be the central health agency. In addition, it is expected that certain other public health work, now conducted by other agencies, would be consolidated with that Service.

The President's Committee on Reorganization did not recommend a separate department dealing solely with health and medical problems for the reason, presumably, that the present functions and expenditures of the Federal Government in this field are not sufficiently large to warrant the establishment of a separate department of health at this time, and for the further presumed reason that it did not seem practicable to establish too many new departments.

On behalf of the President, may I not convey to you this expression of his appreciation of the interest of the Indiana State Medical Association in the health and medical problems of the Federal Government.

Sincerely yours,

(Signed) M. H. McIntyre,
Assistant Secretary
to the President.

We recently commented on the activities of Secretary-editor Brooksher, of Arkansas, in the matter of "medical directories." He continues his activities in fighting these useless and racketeering publications, and we quote from his editorial in the March issue of the *Journal of the Arkansas Medical Society:*

One A. H. Cravens who has been calling on physicians in the state alleging representation of an automobile insurance company in Tennessee was the subject of editorial comment in the February *Journal.* Attention was called to the nature of his activities by a clipping from the *Journal of the American Medical Association,* supplied from the state secretary.

It may be of interest to recount that this individual feeling that his reception in Fort Smith on his initial visit in December was a bit frigid, returned to Fort Smith for the purpose, to quote press statements, "of taking a personal pride in breaking sales resistance among the physicians of the city." On this occasion he received a more active reception

than on his previous visit; an alert physician advised the state secretary of his presence in the city, and the sheriff's office was contacted to arrange for a fitting reception. Among the sidelights of this reception were his endeavor to escape the kind advances of the sheriff and the recovery of a stolen automobile. At this moment, the physicians of Arkansas are safe from his assured promises of many accident victims and their medical care inasmuch as the local calaboose makes no provision for his further participation in the activities of the outside commercial world.

Physicians would do well to remember that the promises of the medical directory promoters will be varied as the knowledge of the resolution adopted by organized medicine forbidding listing in such directories becomes more general among these salesmen. Future sales talks will undoubtedly stress some form of mutual cooperation such as "you buy a policy: I'll see that the business goes to you" and the like. Subterfuge in tagging the physician for his contribution will be varied; one will do well to avoid buying in whatever guise presented.

Only a few days ago, a member of our Association in one of the northern counties sent to us a letter which he had received from a bureau purporting to render service to insurance companies through publication of directories from which insurance companies can make immediate selection of qualified physicians. If an application for inclusion in the directory is accepted, and we have not heard of any refusals, the charge to the physician is ten dollars. As we have said before, reputable insurance companies have no use for such books; they know the physicians upon whom they can depend for good service. We repeat: Save your money, doctor!

To the most casual reader of The Journal, it must be evident that the Indiana State Medical Association stands committed to Surgeon General Parran's program for the control of venereal diseases in this country. Notwithstanding the enormous amount of time and energy necessary to produce the special number of our magazine in March (and that Venereal Disease Control Number has "gone over" in such a big way that there are no more available copies of it), that was only a small beginning. The Indiana State Medical Association does nothing in a slipshod way; its work is cut out; we have made the pledge to stand by, and we have made the initial start; now we must carry on the fight. Dr. Leroy Burney, of the Surgeon General's office, in the March Journal, presented an article with so much of worth in it that it deserves not only the reading interest, but the sit-down-and-study interest of every Indiana physician. He brings the syphilis question right into the Hoosier state, and makes it plain that Indiana is no better than her sister states in the matter of prevalence of venereal diseases. He tells of existing conditions, then sets forth a plan of campaign that is sure to be successful if we adopt it and carry it to completion. Forster's article on the sociologic aspects of these controllable diseases included discussion of the economic phases of the problem. With this background, the March Journal presented the venereal diseases in their true light, and brought to you the most modern ideas as to their management. Without boasting, we believe that the March Journal rather thoroughly covered the subject. To repeat, it now remains for us to carry on, and The Journal plans to continue the campaign editorially, aided by the hundreds of Indiana physicians who are really interested in the problem. From time to time, we shall publish additional information in the way of original articles on the subject, and we shall keep a close watch to see what is being done in other sections of the country. Right now is a good time for our component societies to plan their part in this campaign. Each county society should appoint a committee for this purpose, and whenever requests for speakers are received from civic organizations, women's clubs, luncheon clubs, parent-teacher groups, etc., the opportunity should be accepted. However, it is vitally important that these speakers be prepared and that their talks be not only interesting but informative. A half dozen such talks can easily be prepared from the articles in the March Journal. Much of the seed already sown by the lay press has become deep-rooted, and we are receiving many inquiries from laymen who want facts. It is said that six million residents of this country have syphilis, and that an additional six hundred thousand contract the disease each year. What more is needed to show that there is much to be done by the profession? In Indiana we have an excellent state committee that will contact the county societies from time to time. Dr. Verne Harvey and his capable staff, temporarily denied participation in the earlier program because of flood emergency work, are swinging into action and can be counted upon for active, intelligent cooperation and leadership. We are asked to report our cases of venereal infection, and if this request is not complied with, it probably will become a demand from the Federal government. Compliance with the initial request will not only assist the present program, but save embarrassment in the future. Indiana physicians have ever been ready for emergencies of all sorts; they must continue that trust.

HAVE YOU STUDIED THE PROGRAM FOR THE POSTGRADUATE COURSE?

TURN TO PAGE XXXVIII NOW

FREE ANTI-SYPHILITIC DRUGS

VERNE K. HARVEY, M.D., Director
Indiana State Board of Health

STANDARD OF TREATMENT

Conforming to the United States Public Health Service program for the prevention and control of venereal diseases, the board members of the Indiana State Board of Health, at a meeting March 5, 1937, agreed upon a minimum standard of treatment for indigent syphilitic patients consisting of twenty injections each of arsenical compounds and heavy metal in the form of bismuth sub-salicylate. Upon request the arsenicals and bismuth subsalicylate will be supplied to all private physicians in the State of Indiana after April 15, 1937.

This program has been approved by the Advisory Committee of the Indiana State Medical Association on Venereal Disease Control.

COOPERATION OF PHYSICIANS DESIRED

The State Board of Health is seeking the cooperation of all physicians in the State of Indiana in this movement. If they can get cases of syphilis diagnosed early, and if they can provide the patient with adequate medical treatment, the disease can be controlled, as adequate anti-syphilitic treatment for infectious patients is the best protective measure from a public health standpoint that can be safely carried out. The drugs can be used for the treatment of all indigent patients, but the State Department is primarily concerned with the treatment of early cases of syphilis, or for those patients who have superficial sores, lesions, etc., and for patients who are in a stage of infection or period of life that endangers other individuals or their progeny.

METHOD OF DISTRIBUTING DRUGS

The facilities for the state-wide distribution of these drugs will be handled through the Indiana State Board of Health, State House Annex, Indianapolis. Physicians can procure this material by completing the necessary requisition blanks supplied by the Indiana State Board of Health or their local health officer. The requisitions must be countersigned by the local health officer in the health jurisdiction where the patient resides.

REPORTS OF CASES NECESSARY TO SECURE DRUGS

In compliance with the morbidity report regulations, in the event that the venereal disease case has not been reported in accordance with the provisions of the statutes of Indiana, a venereal disease confidential report card must be mailed to the State Board of Health with the requisition form. Physicians can requisition the Indiana State Board of Health for the 20 c.c. vial of bismuth sub-salicylate and twenty doses (ampules) of neoarsphenamine or sulpharsphenamine. The State Board of Health is carrying in stock neoarsphenamine in the following size ampules: .3 gm., .45 gm. and .6 gm., and sulpharsphenamine in sizes of .3 gm., .4 gm. and .6 gm. ampules.

NO PREFERENCE ALLOWED IN BRAND OF DRUGS

The State Department of Health desires to have it definitely understood that when physicians order this material they cannot be given a preference by designating a certain brand of neoarsphenamine or sulpharsphenamine or bismuth sub-salicylate as may be manufactured by some particular pharmaceutical company. State contracts are accepted on competitive bids, and the State Department of Health cannot stock all brands of arsenical compounds and heavy metals.

SUCCESS OF CAMPAIGN DEPENDS UPON PHYSICIANS

With adequate means for diagnosing syphilis through laboratory tests, and by administering the necessary anti-syphilitic treatments to those infected, the success of this campaign to eradicate this disease is dependent to a great extent upon the cooperation of the attending physician. If physicians faithfully report each case of syphilis, gonorrhea and chancroid to the Indiana State Board of Health, and in addition send in the names of persons reported as sources of infection, and all other contacts and other cases that should be investigated, to their local health officer or the State Department of Health, the outlook for an effective venereal disease prevention and control program in the State of Indiana will be most encouraging.

PROGRAM FOR STATE-WIDE OBSERVANCE OF CHILD HEALTH DAY MAY DAY — May 1, 1937

HOWARD B. METTEL, M.D.
Director, Bureau of Maternal and Child Health
Indiana State Board of Health

Cooperating with the Indiana Advisory Health Council and the Indiana State Medical Association, the Indiana State Board of Health is placing the responsibility for programs celebrating May Day on the Program Chairman of the County Medical Societies. The President, the Secretary, or the Chairman of the Child Health Committee is asked to act as temporary chairman in calling a preliminary conference of professional and civic leaders of the following local organizations.

1. Superintendent of county and city schools.
2. Officers of the county dental society.
3. County nurses.
4. Civic clubs (Rotary, Kiwanis, Lions, service clubs, exchange clubs, etc.).
5. County and city health officers.
6. Tuberculosis Association.
7. Red Cross.
8. Committee on Child Welfare of American Legion.
9. Parent-Teacher Association.
10. Church Federation.
11. County Welfare Board.
12. Local sororities and other women's clubs.
13. Boy Scouts and Girl Scouts.
14. Y. M. C. A. and Y. W. C. A.
15. American Legion Auxiliary.
16. Township trustees.
17. Community fund.
18. Fraternal organizations.
19. Women's auxiliaries of medical society.
20. All other health agencies or clubs interested in child health and child welfare.

From this large committee, a permanent organization is to be formed as follows:

A. Election of a small executive committee, and a permanent chairman.

This committee should be made up of approximately five persons. The duties of this committee should be to have complete direction of the entire program, and the appointment of such special committees as listed below:

a. Committee on Newspaper Publicity

This committee is to have charge of all newspaper publicity, and should secure from other committees at intervals, stories of what they are doing and report them to the newspapers. The interest and service of the newspapers is most valuable. This committee should receive and publish May Day proclamations from the mayors of the various cities in the county.

b. Committee on Speakers, Radio Programs

This committee will have for its purpose the organization of a definite schedule of speakers during Health Week. These speakers should be selected and arranged for in advance, to give appropriate addresses on the subject of child health in the schools, churches, lodges, women's clubs, and Parent-Teacher groups. A well organized speakers' campaign, carefully prepared talks, is one of the most helpful features of Child Health Week programs. Wherever possible, speakers should be obtained through the Secretary of the local County Medical Society.

c. Committee on Clinics

In some counties, arrangements already have been made for conducting such programs as diphtheria immunization, or prevention of other communicable diseases. This committee should be composed of physicians, dentists, and nurses, and must have the official approval of the county medical society before any such program is undertaken. It is understood that in some counties, the local medical society may not wish the formation of this committee. Careful records of the committee's work, or clinical results should be kept. Some county societies already have undertaken health surveys of local school children.

d. Committee on School Health Programs

This committee should be composed of principals and teachers of the county and city schools. The chief duty of the committee is organizing school plays, festivals, athletic events, poster contests, and health exhibits.

After the permanent chairmen for the standing committees are selected, the names of these chairmen or committee heads are to be furnished the State Chairman on May Day, at the offices of the State Board of Health in Indianapolis. From the State Board of Health may be obtained lists of available speakers and subjects, health literature, suggestions for health plays, news releases, copies of the proclamations of the President and the Governor, motion picture reels, and posters. Any assistance that can be offered the local county chairmen in the formation of their programs can be obtained from the Board of Health.

REPORT OF LEGISLATIVE COMMITTEE

No socialized medicine measures enacted.

No cult legislation passed.

That's just about the whole story of the eightieth session of the General Assembly as it pertains to the medical profession.

Although more cult bills were introduced at this session than ever before in legislative history, these measures were more decisively defeated when they came up for a vote on the floor than at any time in recent years. Three cult bills were introduced, all in the House, the cultists centering their attacks in the House of Representatives and making no move throughout the entire session in the Senate.

All three of the cult bills, House bills 297, 400 and 425, were introduced shortly after the General Assembly came back following the ten-day recess in February due to the flood. These measures were all assigned to the House Committee on State Medicine and Public Health, of which Dr. George Denny, of Madison, was chairman.

There are several classes of chiropractors—one group known as "mixers," another as "straights." The "straights," who are greatly in the minority, are graduates for the most part of the old Palmer School and believe in the manipulation of the spine only. The "mixers" not only believe in manipulating the spine but any part of the body by any sort of mechanical contrivance as well as the wholesale use of lights, x-rays, electro-equipment, etc. Each of these groups introduced its own individual measure.

H. B. 297, introduced by William G. Dotterer, Kokomo, to which some twelve other representatives added their names as co-authors, was the chiropractic bill providing for the creation of a separate board of chiropractors. (This was the "mixers'" bill.) H. B. 400, introduced by Representative Bess Robbins, Indianapolis; Lloyd E. Griffith, Huntington, and J. Earl McCurdy, Laporte, was the naturopathic bill providing for the creation of a separate division of the State Board of Medical Registration and Examination to license drugless healers. H. B. 425, introduced by "the straights," provided for a separate board.

Despite the fact that the cultists had a powerful lobby which attempted by every means to put the rush act on the House Committee on State Medicine and Public Health, Chairman Denny withstood all high pressure methods and demanded a complete study and thorough consideration of these measures by his committee before reporting them out on the floor for action. A public hearing was held Monday evening, February 22, at which H. B. 297 and H. B. 400 were considered. Protests against the passage of these measures were made by Dr. William R. Davidson, secretary of the State Board of Medical Registration and Examination; Dr. F. W. Cregor, past president of the Indiana State Medical Association, and "father" of the injunction clause in the present medical practice act; Dr. Willis D. Gatch, dean of the Indiana University School of Medicine at Indianapolis; Dr. Horace R. Willan, of Martinsville, former legislator; Albert Stump, attorney for the Indiana State Medical Association, and Leroy Hanby, of Connersville, who spoke as a citizen. Many physicians and nurses from over the state were present at the hearing and contacted their representatives while in the city.

The speakers and those opposed to these measures, which would have lowered present medical standards, must have made considerable impression on the committee for H. B. 400, the naturopathic measure, was reported out of the committee with a unanimous recommendation for indefinite postponement while H. B. 297 was reported out of committee without recommendation. The committee report came three days after the public hearing, on February 25, the House adopting unanimously by a voice vote the recommendation which killed H. B. 400. The battle came, however, when H. B. 297 was reported out of committee "without recommendation." Immediately Representative Dan Gettinger, of Sullivan, moved for the indefinite postponement of the measure and Dr. Denny seconded the motion. Representative Gettinger made a short but most effective talk supporting his motion to support medical standards and protect the public health. Representatives Bennett H. Rockey, of Sharpsville, and William G. Dotterer, of Kokomo, spoke against the motion to indefinitely postpone the measure, pleading that in fairness it should be printed. The roll call vote was 54 to 27 favoring postponement.

Roll call vote on H. B. 297—for postponement—(against cultists):

Andrew (Tippecanoe)
Barry (Marion)
Baumgartner (Clay)
Black (Madison)
Brembeck (Wabash)
Capper (Fulton-Pulaski)
Chattin (Daviess)
Coffin (Parke)
Coons (Montgomery)
Couch (Morgan)
Creighton (Kosciusko)
Cubby (Vigo)
Denny (Jefferson-Scott)
Denton (Vanderburgh)
Dillin (Knox-Pike)
Foster (Hamilton)
Gettinger (Sullivan)
Gibbons (Posey, Vanderburgh, Warrick)
Goddard (Henry-Rush)
Griffith (Huntington)
Guernsey (Lawrence)
Gulley (Dearborn-Ohio)
Harris (Union-Wayne)
Henley (Monroe)
Hiestand (Jasper-Newton)
Hill (Johnson-Marion)
Himschoot (St. Joseph)
Hoover (Elkhart)
Hughes (Elkhart)
Johnson (Henry)
Kitch (Marshall)
Klein (Lake)
Knapp (Wayne)
Leavell (Randolph)
Linke (Bartholomew)
Lomont (Allen-Whitley)
Lutz (Marion)
McCaslin (Marion)
Miller (Marion)
Muller (Madison)
Neumann (Tippecanoe-Warren)
O'Grady (Vigo)
Parker (Hendricks)
Pickens (Floyd)
Roell (Shelby)
Ropke (Marion)

Rowley (Delaware)
Shull (DeKalb)
Skinner (Delaware)
Smith (Boone)
Stearns (Decatur-Jennings)
Stein (Greene)
Strickland (Hancock-Madison)
Treadway (Owen-Putnam)

Against postponement—(for cults):

Anderson (Perry-Spencer
Bach (Marion)
Ballard (Knox)
Bartley (Dubois-Martin)
Braun (Allen)
Carter (Grant)
Dotterer (Howard)
Emhardt (Marion)
Flock (Crawford-Harrison)
Garnitz (St. Joseph)
Gavit (Lake)
Gladieux (Allen)
Hoffman (Lake-Porter)
Hopper (Cass)
Kent (Clinton)
Krueger (Laporte)
Lenz (Allen)
McCurdy (Laporte-Starke)
Mayhill (Carroll-Cass)
Radabaugh (Blackford-Grant)
Robbins (Marion)
Rockey (Howard-Tipton)
Schaeffer (Vanderburgh)
Talley (Marion)
Wadsworth (Marion)
Wakelam (Marion)
Warnick (Fountain)

Not voting:

Baylor (Clark)
Callahan (Lake)
Castner (Ripley-Switzerland)
Downey (Lake)
Emig (Vanderburgh)
Ferguson (Fayette-Franklin)
Ferguson (Jay)
Gonas (St. Joseph)
Lee (Gibson)
Modisett (Vigo)
Moody (Lagrange-Steuben)
Prime (Orange-Washington)
Roszkowski (Lake)
Slenker (Benton-White)
Spurgeon (Noble)
Sturm (Vermillion)
Thompson (Adams-Wells)
Thompson (Brown-Jackson)
Wolf (Miami)

The vote came early in the morning and a number of representatives were not present. Many of the twenty-seven representatives who voted for having the cult bill printed stated they would have voted against the bill had it been up for final passage.

The last of the three cult bills, H. B. 425, was not called out of committee and remained there to die with the end of the session, the House apparently having its fill of such legislation.

The committee particularly wishes to call your attention to the fact that bills were passed providing for more rigid pasteurization of milk, protecting the public by making it illegal to sell milk unless it is pasteurized or comes from herds which have been tuberculin and abortion tested.

A step forward was taken by strengthing the sterilization laws, giving the superintendents of institutions more authority in this respect.

The safety program passed by the legislature includes the creation of a safety commission with the director of the State Division of Public Health as a member, and it also provides for more stringent regulations for issuing drivers' licenses.

Among the important measures passed by the legislature are the two which make occupational diseases as well as injuries compensable under the Workmen's Compensation Act and extend from thirty to ninety days the period for medical treatment of an injured employee.

A measure licensing collection agencies is thought to be a good one as it should curb the activities of many fly-by-night collection agencies which in the past have taken many dollars away from physicians.

A garnishee bill also was passed and signed by the Governor which authorities feel will be held constitutional.

Centralization of the welfare set-up was more nearly accomplished by the passage of H. B. 460 which was substituted for the very famous S. B. 173 which caused the Baker-Coy-Cancilla affair. Under this act the state welfare board may set up standards to be followed by the local welfare board in naming its employees.

Before giving a detailed summary of the legislation enacted and the bills that failed, your committee wishes to express its deep appreciation for the wholehearted cooperation it received from the various county legislative committees, the individual members of the profession, and the leading citizens throughout the state. The flood of letters and telegrams protesting against legislation which would lower medical standards was indeed effective. We wish especially to thank those who made trips to Indianapolis or contacted their legislators personally here or at home and urged them to defeat these three measures, any one of which had it passed would have endangered the public health and welfare.

Thanks again!

Respectfully submitted,

COMMITTEE ON PUBLIC POLICY AND LEGISLATION,
NORMAN M. BEATTY, M.D., *Chairman*,
O. T. SCAMAHORN, M.D.
GEORGE DANIELS, M.D.
GEORGE DILLINGER, M.D.
B. J. LARKIN, M.D.
W. W .WASHBURN, M.D.
E. L. SCHAIBLE, M.D.
J. WILLIAM WRIGHT, M.D.
KEITH T. MEYER, M.D.

Bills affecting the medical profession which were signed by the Governor or became laws without the Governor's signature follow:

SAFETY, PUBLIC HEALTH, AND INSTITUTIONS

Appropriations—H. B. 304 (Ropkey and Creighton) Budget bill. Appropriations for the State Board of Health generally were in line with last session except that $50,000 additional for 1937 and $75,000 for 1938 was budgeted to match Federal funds to carry out the health education provisions of the Social Security Act.

Tax levy raise for Indianapolis City Hospital.—H. B. 79 (Lutz). Permitting tax levies up to 15 cents on each $100 of property for city departments of public health, and up to 3 cents for tuberculosis purposes. The limits now are 12 cents and 1 cent, respectively. This is to aid the City Hospital of Indianapolis and also maintain the Flower Mission Tuberculosis Hospital.

Will transfer patients from Julietta—S. B. 32 (White). Permits transfer of patients at Marion County Insane Hospital at Julietta to the Central State Hospital; Marion County to deed county infirmary ground to the state and transfer infirmary inmates to Julietta. Emergency clause.

Prohibits sale of diseased animals—H. B. 356 (Sturm). Prohibiting sale for food purposes of diseased or injured animals and providing for condemnation by state veterinary inspectors at stockyards. Penalty, $25 to $250 fine for violation.

Sterilization of feeble-minded in institutions.—H. B. 146 (Kitch). Provides that physicians appointed by a court to examine persons committed to institutions for the feeble-minded shall certify whether the welfare of society and of the committed person would be promoted by sterilization. Companion bill of H. B. 147.

Allows sterilization of institutionalized epileptics.—H. B. 147 (Kitch). Includes epilepsy and incurable primary and secondary types of feeblemindedness among the diseases for which superintendents of institutions for the feeble-minded may recommend sterilization; the governing board of the institution has final authority to order sterilization in such cases.

Creation of safety commission.—H. B. 237 (Hughes and others). Creates a state committee on safety of one member each from the Public Service Commission and State Highway Commission, then state director of safety, commissioner of motor vehicles and the secretary of the State Board of Health, to promulgate regulations governing house cars and trailers and safety regulations as to motor car accessories. Effective January 1, 1938.

Strengthens drivers' regulations.—H. B. 230 (Emig and others)—Setting up more stringent drivers' license regulations and more severe penalties. Provides separate classifications of beginner's permit, beginner's license, operator's license, chauffeur's license, and public passenger chauffeur's license. Provides for revocation of license at discretion of license commissioner for an unfavorable driving record. Effective January 1, 1938.

More rigid milk law.—H. B. 324 (Capper and Pickens). Giving the State Board of Health authority to set standards for pasteurized milk. Allows board to define methods of pasteurization. This law makes it illegal to sell milk unless it is pasteurized or unless it comes from herds which have been tuberculin and abortion tested.

Separation of Feeble-Minded Schools.—S. B. 292 (Gottschalk-Garrott). Separates Indiana School for Feeble-Minded Youth at Fort Wayne and the feeble-minded colony at Butlerville. Creates a board of trustees for the Butlerville institution .

Medical Economics

Occupational diseases made compensable.—H. B. 169 (Callahan and others). Extends benefits of workmen's compensation act to occupational diseases as well as injury. State Federation of Labor and administration measure.

Extension of medical treatment period.—S. B. 203 (White and others). Extending from thirty to ninety days the period an employer is required to provide medical treatment for an injured employe, increasing the burial allowance from $100 and $150 and providing more strict penalties for violations of the act.

Welfare provisions. — H. B. 460 (Thompson and Hughes). Requires examinations of county welfare directors under standards set out in the bill, and provides that the Marion County director shall be appointed by the State Board of Public Welfare. Same bill as Senate Bill 173, which it replaces, except for appointment of the Marion County director by the state board. All provisions effective July 1, 1937, except Marion County appointment, which became effective on signature of the Governor.

The law also provides that all physicians or midwives delivering children with *visible congenital defects* must report same to the State Welfare Board on forms supplied by that Board within thirty days, and provides penalties for failure to do so.

Licensing collection agencies.—H. B. 44 (Lomont and Lenz). Licensing collection agencies and requiring bond of $2,000, and setting a penalty of $25 to $100 and imprisonment up to ninety days for violation. This is intended to curb the activities of many fly-by-night collection agencies which have taken many dollars away from physicians and other professional men.

Garnishee bill enacted.—S. B. 221 (Sohl and others). Garnishee bill, making 10 per cent of salary or income of a person over $15 per week subject to levy. Several county medical societies passed resolutions favoring the passage of this measure. The state committee, however, felt that it should take no active part in passing such a law.

Miscellaneous

Licensing of pharmacist apprentices.—H. B. 41 (Rockey). Making pharmacist apprentices, whose apprenticeships began before January 1, 1920, and whose certificates as pharmacist apprentices were issued before July 1, 1920, eligible to take the registered pharmacist examination before January 1, 1938. Emergency.

Delinquent tax relief.—H. B. 57 (Sturm). Gives delinquent real estate taxpayers opportunity to avoid sale of his property by notifying county treasurer by the third Monday in March that he will amortize his delinquent taxes over a six-year period, payable in twelve semi-annual installments; current taxes must be paid, and interest on the delinquency will run from 1936; sale of property

where delinquencies are not amortized will be held the second Monday in April; legalizes publication where delinquent tax notice already has been advertised. Signed January 22.

Fees to county clerks.—S. B. 101 (Bedwell and Sohl), Granting a fee of $5.00 to county clerks for each admission and discharge of a patient from any state hospital.

Physician's statement necessary.—H. B. 141 (Chattin). Requiring that a motion for continuance in a law case by a defendant because of illness of the defendant or a witness be accompanied by a statement by a physician under oath, and providing that the court may appoint a physician to examine the defendant or witness to determine when he can appear at trial.

Bills Failing to Pass

S. B. 16 (Carlson).—Placing with county clerks the duty of keeping birth and death records. As this measure would have meant unnecessary work for the health officers it was opposed by the State Board of Health. Died in committee.

S. B. 74 (Arnold).—Birth control bill. Repeals act which prohibits dissemination of information on birth control. Died in committee.

S. B. 128 (Bedwell).—Substitute bill for S. B. 16. Provides that circuit court clerks shall keep permanent records of births and deaths; records to be prepared in first instance by health officers who send one copy to clerk and the second to State Board of Health. Passed Senate; died in the House.

C. B. 132 (Johnson of Morgan).—Requires annual physical examination of teachers in public schools. Passed Senate; killed in the House.

S. B. 173 (McBride).—Establishes standards for employees of county welfare departments; clarifies procedure for placement of crippled children in hospitals. Passed Senate; lost in the House Judiciary A Committee. H. B. 460, substituted for it, was passed and signed by the Governor.

S. B. 226 (Carlson).—Provides for licensing and regulation of restaurants by State Board of Health. Postponed in Senate.

H. B. 2 (Barry).—Amends workmen's compensation act to extend medical, surgical and hospital service from 30 to 60 days. Died in House and compromise bill, S. B. 203, was passed and becomes a law in its place.

S. B. 140 (Sexton and Hendricks).—Provides that township trustees pay out of the poor relief fund instead of the township general fund cost of providing insulin to indigent diabetic patients. Passed Senate; died in House.

H. B. 12 (Barry).—Adding injuries to the eyes to the list for which compensation is to be paid. Died in House.

H. B. 22 (Denton).—Eugenics bill, requiring that 5 days elapse between applications and issuance of marriage license; requiring a physical examination at a fee up to $3.00. Died in the House.

H. B. 102 (Wolf and Bartley).—Makes eligible crippled, deformed, diseased and disabled adults to benefits of the Public Welfare Act. Died in House.

H. B. 122 (Denton).—Fixes salary of county health officers. No action.

H. B. 137 (O'Grady).—Setting minimum standards for administering direct relief "sufficient to nourish and adequately maintain life in health and decency." No action.

H. B. 152 (Emhardt).—Directs the State Board of Pharmacy to give a registered pharmacist's license to any registered assistant pharmacist who has been practicing as an assistant not less than eight years. Died in committee.

H. B. 171 (Guernsey).—Creates state commission on free clinics, consisting of 5 members, the director of the State Division of Public Health to be an ex-officio member, one member to be appointed by the Governor, one by the president of the State Federation of Woman's Clubs, one by the president of the State Federation of Labor, and one by the American Legion state commander, to study and plan free clinics. This is a real state medicine measure. Died in committee.

H. B. 297 (Dotterer).—Establishes a State Board of Chiropractic and physical therapy practitioners. Bill of the "mixer" group of chiropractors. Killed in House, 54 to 27.

H. B. 400 (Robbins).—Creates a state division of drugless therapy of three members supplemental to the State Board of Medical Registration and Examination. The naturopathic bill. Killed by unanimous voice vote.

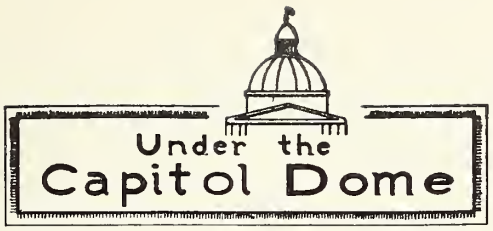
H. B. 425 (Ferguson of Jay).—Creates state board of chiropractic examiners. "Straight" chiropractic bill. Died in committee.

H. B. 313 (O'Grady and Cubby).—Restricting the office of coroner to licensed physicians and surgeons. Died in the House.

Of the 461 bills introduced in the House, 26 had some bearing on the public health or were of special concern to the profession.

Out of 310 bills introduced in the Senate, 9 had to do with the medical profession.

Of these 35 bills, 19 passed.



DR. HARVEY RE-APPOINTED

Dr. Verne K. Harvey has been re-appointed by Governor Townsend to be director of the Indiana State Board of Health and to serve as a member of the Indiana Safety Committee.

PROGRESS OF HEALTH WORK IN FLOOD AREA

Health angles of the rehabilitation program in the southern Indiana flood area are progressing satisfactorily, according to Dr. Verne K. Harvey, secretary of the state board of health.

Most of the emergency sanitation work such as pumping and slushing of wells, cisterns, water mains, and similar activities has been completed, but some in scattered areas remains to be done. With hundreds of flood victims living in tent cities in Lawrenceburg, Jeffersonville, and Evansville, and with additional victims concentrated in buildings, the state department is keeping a watchful eye on these points. The tent cities were located with the advice of the department and sanitary and water supply problems were taken care of at the time of their inception. However, inspectors make periodical trips to each concentration point.

The department also is engaged in supervision of construction of sanitary privies throughout the area.

Plans whereby public health will be safeguarded in every county of the flood area until the rehabilitation program is entirely completed have been made, Dr. Harvey said. A public health nurse will be in each county. The four health districts established during the flood will be maintained with health officers, sanitary engineers, public health nurses, and supervisors, and office personnel. These districts are at Huntingburg, New Albany, Dillsboro, and Evansville.

COMPARISON OF COMMUNICABLE DISEASE REPORTS FOR FIVE YEARS

A study of reported cases of communicable diseases for January and February of this year as compared with a five-year average for the corresponding period beginning in 1933, showed a higher incidence in seven diseases for January and six for February, and lower than the average for six diseases in January and seven for February, according to a report prepared by Dr. Verne K. Harvey, secretary of the state board of health.

The tabulation was for the entire state.

For January tuberculosis showed 247 reported, as compared with the five-year average of 159.4, and for February 151 as compared with the 168.2 for the five-year average. Increases were shown for January in scarlet fever, smallpox, whooping cough, influenza, pneumonia, and meningitis, while decreases were shown in chickenpox, measles, typhoid fever, diphtheria, mumps, and poliomyelitis.

For February increases were shown in smallpox, whooping cough, influenza, pneumonia, poliomyelitis, and meningitis. Decreases were shown in all other reportable communicable diseases.

INCIDENCE OF FEEBLE-MINDEDNESS IN STATE REFORMATORY INMATES

Nearly half the men admitted to the Indiana State Reformatory during the past fiscal year were definitely feeble-minded, according to the annual report of the institution.

A total of 754 men were admitted (of whom six were not given mental tests), and of this number 324 were rated feeble-minded. Crimes for which they were committed were: forty-three for crimes against person, 256 for crimes against property, and twenty-five for crimes against public order.

Only one prisoner received during the year was given a superior intelligence rating. His was a crime against property. Forty-seven were given average intelligence ratings; 152 were rated dullards; 204 as borderline, and 10 imbeciles.

The average chronological age (754 men) was 22 years, five months, while the average mental age (748 men) was 11 years, 8 months. The average intelligence quotient was 72.9. The report showed the average mental age (Binet) to be 16 years and the average intelligence quotient (Binet) to be 100.

HOUSING PLANS

The state planning board is urging the study of housing in all Indiana counties by county planning boards. Any Indiana county may appoint a planning board under provisions of a 1935 act.

"In nearly all communities there are areas of housing which are far below the standards of living befitting even the lowest paid group of workers," the state planning board said in a brochure on "County Planning Problems and Their Relative Importance."

"This," the board said, "is a serious problem, affecting not only the people who live in such houses but also the economic and social welfare of the entire city.

"The remedy rests in either clearing such areas or housing or replacing them with decent dwellings which can be rented within the means of people of low income. It has been demonstrated that such districts are costly to all taxpayers and that they are now being subsidized by the public." In dealing with the problem the state board suggested cooperation between the health, school, fire, and other state and Federal agencies.

VOICE OF MEDICINE

COMMENT REGARDING ALL-TIME HEALTH OFFICERS

There is nothing so convincing and satisfying as the truth concerning any proposition. From my view-point, this all-time health organization is a proposition that vitally concerns every member of the medical profession of the State of Indiana, and it should be analyzed and handled from the standpoint of truth and right.

We all know that the success and results obtained by any health organization are almost entirely dependent upon the cooperation of the members of the medical profession. This being true, what reasonable excuse is there for an all-time health organization? Perhaps the outstanding reason is that a few persons covet life-time jobs and life-time salaries. Personally, I am wholly opposed to the all-time health organization. Any one who asks for or requests an appointment to a life-time job manifests a well-developed attitude of selfishness; in truth, no one but a selfish person would make such a request.

Selfishness is one-sided and never dependable; it promotes limitation and stifles progress. A selfish person always wants and asks for all of anything he desires, and in order to get what he seeks, he will make all kinds of promises and picture all kinds of advantages that will materialize if he should come into possession of the coveted life-time job and life-time salary. Naturally, the seeker after this job will stoutly deny that he is interested only in the job and salary; he would have us believe that he is motivated by his love for humanity and his desire to create conditions which will insure the richest and fullest measure of community welfare. Let us test his sincerity. Let us amputate that appendage of life-time salary and note what happens. We all know what will happen.

A very eager and ambitious disciple of the all-time health organization recently paid quite a compliment to the State of Indiana. In a recent issue of THE JOURNAL we read that Indiana has been a "laggard" in this important type of public health organization because there was no permissive legislation until 1935. This disciple of all-time health organization does not accuse Indiana of being a laggard in her splendid work and brilliant results in all things pertaining to the welfare of public health. He dares not do that. I do not believe that Indiana has lowered herself to the level of a laggard just because she has not fallen for the all-time health organization with its life-time salary and job, and I hope that Indiana will continue to be guided by truth and right and remain a "laggard" in this regard.

An all-time health organization has nothing new or attractive to offer other than the life-time job and life-time salary; in every other way it proposes to do the very things that are being done at present by the health board system. However, we are asked to believe that they will do things better because of their grip on the life-time job and salary. It makes no difference what kind of an excuse is offered, nor how loud or long the salary-seeker may protest his innocence of selfishness—the very nature of his request convicts him of selfishness.

On page 37 of our JOURNAL for January we read of the advantages as follows:

(1) "It makes possible a well-rounded health program." Note that "it makes possible"—we have had this well-rounded health program right along under the present health board system, and it has been functioning with fine results, so this is nothing new that is offered us.

(2) Again, "It is able to give much greater effectiveness to such a program, through a stability and continuity otherwise impossible." Here stability and continuity are stressed, and we can understand how a life-time salary and job gives to such an organization firmness and fixedness and uninterrupted succession. However, we seriously doubt that such stability and continuity constitutes a valid reason or a dependable guarantee of greater effectiveness to a well-rounded program.

(3) In another instance, "It prevents overlapping and duplication of effort." This is not difficult to understand for we know it would be impossible for one who holds a life-time job and salary to overlap his appointment, and it would be unnecessary for him to duplicate his efforts for reappointment, because he is a life-time fixture.

(4) "Responsibility for local health conditions is fixed." This does not say that local health conditions are fixed, it says that responsibility is fixed; it sure is—and how! It is settled for a life-time.

(5) "It is flexible, allowing each locality to cope with its problems as it deems best." It is easy for one who has a life-time job to develop a condition in which he feels that sense of security creeping over him, and realizing that he is on a life-time job, he leans on his oars and says, "I should worry; soul take thine ease; let the community cope with its own problems as it deems best." This is where the all-time health organization would purposely lose its fixed responsibility and become flexible.

(6) "Through efficiency and coordination with other agencies in handling health problems, it provides a health service much better proportionately than the increased cost would indicate." This increase in cost would be in great part off-set by better school attendance, fewer days of lost work, and by lessening the financial burden on the public for the care of the indigent sick by reason of the program's preventive and educational features. This so-called advantage takes on the complexion and sound of a promise made by a rip-roarin'

(Concluded on page 226)

DEATHS

Isaac N. Trent, M.D., retired physician and legislator of Muncie, died March fourth, aged eighty-two years.

Dr. Trent had served fourteen years as a Republican state representative and senator in the Indiana legislature, representing Delaware county. He was a member of the House of Representatives from 1923 to 1933 and of the Senate from 1933 to 1936, and was noted for his support of public school, health, game conservation and farming measures.

Dr. Trent had practiced medicine and surgery in Muncie for forty-nine years. He was a member of the Delaware-Blackford County Medical Society, the Muncie Academy of Medicine, and an honorary member of the Indiana State Medical Association. He graduated from the Kentucky School of Medicine in Louisville in 1881 and from Columbia University College of Physicians and Surgeons in New York in 1887.

Memorial resolutions were passed by the Indiana Senate and a memorial tribute prepared by the Delaware-Blackford County Medical Society was published in the Muncie newspapers.

Charles F. Hope, M.D., of Shoals, died suddenly, March eighth, while attending a patient. He was sixty-nine years old. Dr. Hope had practiced in Ellettsville and had served as president of the Monroe County Medical Society in 1933. He was a member of the Daviess-Martin County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Medical College of Indiana, Indianapolis, in 1896.

Charles J. Kneer, M.D., of Oaklandon, died March third, aged sixty-one years. He had been a practicing physician for thirty-six years. Dr. Kneer was a member of the Indianapolis Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Medical College of Indiana, Indianapolis, in 1901.

V. C. Brunson, M.D., of Newville, DeKalb county, died March fifteenth, aged eighty-one years. Dr. Brunson was a graduate of the Toledo Medical College in 1884.

Stephen A. Hall, M.D., of Advance, died at the home of his son in Louisville, Kentucky, February twentieth. Dr. Hall was seventy-two years old. He had practiced in Advance for forty years. He graduated from the Kentucky School of Medicine, Louisville, in 1894.

Frank W. Smith, M.D., of Gary, died February eighteenth. Dr. Smith was sixty-nine years old. He graduated from the Indiana Medical College, School of Medicine of Purdue University, Indianapolis, in 1907.

Jay Stiles, M.D., of Lena, Indiana, died March twelfth, aged sixty-nine years. Dr. Stiles had practiced at Lena since 1912 but had been inactive the past three years because of illness. He graduated from the Ohio Medical University at Columbus in 1898.

Sylvester I. Arthur, M.D., of Patoka, died March fifteenth. Dr. Arthur was seventy-three years old. He graduated from the St. Louis University School of Medicine in 1907 and commenced his practice at Patoka in 1909. Before his retirement from active practice more than a year ago, he practiced at Princeton for a period of seven years, and served as Gibson County health officer while there. Dr. Arthur was a member of the Gibson County Medical Society, the Indiana State Medical Association and the American Medical Association.

Clyde Talbot Bundy, M.D., of Earl Park, died February eighteenth. Dr. Bundy was fifty-two years old. He had conducted a practice at Earl Park for twenty-six years. He served overseas with the U. S. Army during the World War and held the rank of captain in the medical corps. Dr. Bundy graduated from the University of Illinois College of Medicine, Chicago, in 1909, and was a member of the Benton County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

Robert B. McKeeman, M.D., of Fort Wayne, died March fourth, from pneumonia. Dr. McKeeman graduated from the Fort Wayne College of Medi-

cine in 1897 and had practiced in Fort Wayne for thirty-five years. He was a member of the Fort Wayne (Allen County) Medical Society, of which he was vice-president at the time of his death, a member of the Indiana State Medical Association and of the American Medical Association.

John Edward Doerr, M.D., of Mount Vernon, died March seventh, aged seventy-one years. For forty-one years, Dr. Doerr had practiced in the community of Mount Vernon. Dr. Doerr graduated from the University of Pennsylvania School of Medicine, Philadelphia, in 1891. Following that, he did postgraduate work in this country and abroad. He was a member of the Posey County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

Jacob Willis Hill, M.D., of South Bend, died February twenty-third, aged seventy-eight years. Dr. Hill had been a practicing physician in South Bend since 1886, and had held many positions of honor and trust in his community. He served as a member of the St. Joseph county board of health for many years. He graduated from the Jefferson Medical College, Philadelphia, in 1881. He was a member of the St. Joseph County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

William Cornelius Horn, M.D., retired physician of Pennville, died February twenty-seventh, aged eighty-three years. Dr. Horn graduated from the Miami Medical College, Cincinnati, in 1880.

John Harvey Foster, M.D., of Michigan City, died March eighth, aged sixty-two years. Dr. Foster was once prison physician at the Michigan City prison and had served as a county coroner for Laporte county. He had practiced at Michigan City since 1914. Dr. Foster graduated from Rush Medical College, University of Chicago, in 1900. He was a member of the Laporte County Medical Society, the Indiana State Medical Association and the American Medical Association.

Charles B. Mulvey, M.D., of Montpelier, died at his home there, February twenty-fourth, aged sixty-nine years. Dr. Mulvey graduated from the Medical College of Indiana, Indianapolis, in 1894 and had practiced in Montpelier since that time. He had served as Blackford county health officer.

C. Marion Glock, M.D., of Arcola, died March eighth, aged sixty-one years. Dr. Glock had practiced in Arcola for more than thirty years. He graduated from the Fort Wayne College of Medicine in 1903. Dr. Glock was one of the organizers and was president of the Arcola State Bank.

John Grover Scifres, M.D., of Indianapolis, died March first in an Indianapolis hospital after a short illness. Dr. Scifres was fifty-two years old. He graduated from the Indiana University School of Medicine in 1908 and had previously obtained a degree in engineering from Purdue University.

Othello L. Deitch, M.D., for forty-seven years a practicing physician in Indianapolis, died February twenty-seventh, aged seventy-two years. Dr. Deitch graduated from the Medical College of Indiana, Indianapolis, in 1890.

William Edgar Callison, M.D., of Winchester, died February twenty-sixth, from pneumonia. Dr. Callison graduated from the Yale University School of Medicine, New Haven, Connecticut, in 1927, and served as an instructor in the school following his graduation. He was a member of the Randolph County Medical Society, the Indiana State Medical Association and the American Medical Association.

John Thomas Middleton, M.D., of Edinburg, died in Key West, Florida, February twenty-eighth. Dr. Middleton was spending the winter in Florida. He was seventy-four years old. Dr. Middleton had practiced in Edinburg and Nineveh for forty-seven years. He graduated from the Medical College of Ohio, Cincinnati, in 1890 and did postgraduate work in Chicago and New York. He was active in banking circles, and had served as president of the Farmers National Bank in Edinburg and of the Johnson County National Bank in Franklin. He had not been very active in practice for the past few years.

HOOSIER NOTES

The third annual meeting of the American Neisserian Medical Society will be held in the Senator Hotel, Atlantic City, June 8, 1937. The program will consist of papers and discussions of the various phases of the management and control of gonorrhea. All who are interested are cordially invited to be present.

Dr. Austin R. Logan, of Petersburg, was in an automobile accident, February twenty-seventh, and suffered a broken jaw, several broken ribs and other injuries.

Dr. O. T. Brazleton, of Princeton, talked on "Prevention and Care of Typhoid Fever" before the luncheon meeting of the Princeton Kiwanis club, March tenth. Special tribute was paid to Dr. John N. Hurty, former head of the Indiana State Board of Health, and his educational work in this field.

Members of the Greene County Medical Society are enjoying the facilities of the new addition to the Freeman-Greene County Hospital at Linton.

Dr. Frank M. Biddle, of Battle Ground, is enjoying a month's vacation in St. Petersburg, Florida.

Miss Margaret Ethel Morris, of Indianapolis, and Dr. Harvey W. White, of Indianapolis, were married March twenty-seventh. They will reside in Martinsville where Dr. White will be on the staff of the Home Lawn Sanitarium.

Dr. Thurman B. Rice talked about "Dangerous Proprietary Medicines and Cosmetics" at the meeting of the Indianapolis Medical Society Woman's Auxiliary, March fifth.

At a meeting of the staff society of the Home Hospital in Lafayette, Dr. Edwin N. Kime, of Indianapolis, presented a paper on "Fever Therapy and Inductotherapy."

Dr. R. L. Sensenich, of South Bend, addressed members of the Hammond Rotary Club, March second, on "The Social Aspects of Sickness."

Aproximately sixty persons, physicians and their wives, from southern Indiana, attended a dinner meeting of the Tri-County Medical Association, held in Seymour, March third. An illustrated lecture on "Present Day Treatment of Pneumonia" was presented by Dr. F. E. Schmidt, of Philadelphia.

Dr. Bennett Kraft, of Indianapolis, has moved his office from 502 Bankers Trust Building to 650 Bankers Trust Building.

Dr. J. L. DeNaut, of Hamlet, is receiving many compliments upon the appearance of his new office.

Dr. William A. Spurgeon, of Muncie, is the author of a recently published book entitled "The Conquering Christ."

Dr. Guy W. Seaton, of Indianapolis, and Miss Geneva Hall, of Indianapolis, were married February twenty-eighth.

An auxiliary to the Wabash County Medical Society was organized, March third, at Wabash, under the direction of Mrs. George Dillinger, of French Lick. Officers for the county auxiliary were named as follows: Mrs. E. D. Pearson, president; Mrs. G. M. LaSalle, vice-president; Mrs. G. W. Seward, secretary, and Mrs. J. G. Kidd, treasurer.

Dr. Harold F. Zwick has announced plans to open his office in Decatur for the general practice of medicine. Dr. Zwick has been resident physician at the Richmond state hospital for the past year.

Dr. Karl Eberly, of Fort Wayne, talked on "The Fight Against Syphilis" before the Fort Wayne Rotary Club at its luncheon-meeting, March eighth.

Dr. William S. Ehrich, of Evansville, addressed a group at the Y. M. C. A., March eighth, on "Social Diseases."

Dr. J. M. Lee has moved from Rushville to Dayton, Ohio, where he has accepted a position.

The Muncie Academy of Medicine has announced that Dr. L. J. Karnosh, of Cleveland, will speak at the April thirteenth meeting of the Academy in Muncie. His subject will be "Neurological Conditions and Surgery." At the March thirty-first meeting, Dr. M. A. Blankenhorn, of Cincinnati, talked on "The Deficiency Diseases in the Adult."

Dr. Warren F. Draper, assistant surgeon-general of the United States Public Health Service, gave an address before the seventh annual Retail Druggists' Business Conference at Purdue University, March twenty-fourth.

An illustrated lecture on "Cancer and Its Control" was presented at a public meeting in Greensburg, March seventeenth, under the sponsorship of the Decatur County Medical Society. Dr. Chester A. Stayton, of Indianapolis, was the principal speaker.

A business and social meeting of the Madison County Medical Auxiliary was held March fifteenth when plans were made for a hospital guild sponsored by the auxiliary for all groups interested in making articles needed at the St. John's Hospital in Anderson.

Dr. E. D. Smith, of Fort Wayne, has been made vice-president of the Fort Wayne (Allen County) Medical Society to complete the term of the late Dr. R. B. McKeeman.

Dr. Lacey L. Shuler, of Indianapolis, recently completed a series of talks on fractures which were presented before the Physicians' and Surgeons' Study Club of Grant County.

At the meeting of the Madison County Medical Society held in Anderson, March fifteenth, four physicians were made honorary life members. They are Dr. O. W. Brownback, of Pendleton, Dr. L. E. Alexander, of Pendleton, Dr. A. E. Otto, of Alexandria, and Dr. Etta Charles, of Anderson.

A postgraduate course of instruction in Diseases of Children will be held in Louisville, Kentucky, at the Children's Free Hospital, each Wednesday for ten consecutive weeks beginning April 28, 1937. The course is sponsored by the Kentucky State Medical Association. A charge of $5 will be made for the entire course and a certificate will be issued if desired. Further information may be obtained from Dr. Philip F. Barbour, Heyburn Building, Louisville.

The Lafayette Academy of Medicine has arranged a dinner meeting, April twenty-seventh, which all interested physicians are invited to attend. It will be held at Lincoln Lodge. Speakers will include Dr. Phil Thorek, associate surgeon, Cook County Hospital, who will talk on "Differential Diagnosis of Gallbladder Disease," and Dr. Max Thorek, professor of surgery, Cook County Post-Graduate School of Medicine, who will discuss "Electrosurgical Obliteration of the Gallbladder." Dr. Thomas B. Noble, Jr., of Indianapolis, will be a discussant. Reservations may be made with Dr. B. A. Burkhardt, of Tipton, Indiana.

TENTH DISTRICT MEDICAL SOCIETY

The regular annual meeting of the Tenth District Medical Society will be held at the "Spa," thirteen miles east of Broadway, Gary, on route 20, April 8, 1937.

5:00 P. M. Archibald L. Hoyne, M.D., chairman of pediatrics, Cook County Hospital.

Subject: "Newer Therapy of Infectious Diseases."

6:00 P. M. Charles B. Peustow, M.D., assistant professor of surgery, Illinois Medical School.

Subject: "Post Operative Care."

7:00 P. M. Banquet.

Guest Speaker: William S. Sadler, M.D., psychiatrist and public speaker.

Subject: "Mental Hygiene."

STATE PEDIATRICIANS

The first day of the combined Postgraduate Week, given by the Indiana State Medical Association and the Indiana University School of Medicine, has been set aside as a Pediatrics Day. The day will be devoted entirely to pediatrics and the Indiana State Pediatric Society will be responsible for the program.

The program will consist of clinics in the morning, round table discussion in the afternoon, dinner meeting in the evening and a night speaker followed by a social hour.

Pediatricians, remember Monday, May 10, 1937.

U. S. NAVY MEDICAL CORPS

The medical corps of the United States Navy offers a number of interneships and commissions to graduates of class "A" medical schools. Examinations will begin on May 10, 1937, and applications should be on file at least one month prior to that date. Qualified candidates who have completed interneships in civilian hospitals will be commissioned as Assistant Surgeons with the rank of Lieutenant (junior grade) and assigned to the Naval Medical School, Washington, D. C., for postgraduate instruction. Senior medical students who qualify for appointments to interneships in Naval Hospitals will be appointed Acting Assistant Surgeons with the rank of Lieutenant (junior grade) for temporary service during the interne year, and upon satisfactory completion of interneship will be allowed to appear for competitive examinations for permanent appointment. Should an interne desire to return to the practice of medicine in civil life, his appointment as an Acting Assistant Surgeon will be terminated and he will be honorably discharged. Officers of the rank of Lieutenant (junior grade) without dependents receive compensation of $2,699 per year; those with dependents receive $3,158 per year. There are additional cash allowances. Any interested physician may write for further particulars to the Bureau of Medicine and Surgery, Navy Department, Washington, D. C.

JOINT MEETING OF INDIANA TUBERCULOSIS ASSOCIATION INDIANAPOLIS MEDICAL SOCIETY

The regular meeting of the Indianapolis Medical Society on April 13 will be held jointly with the Indiana Tuberculosis Association at the Lincoln

Hotel, Indianapolis. This session, which will open at 8:00 p. m., is to be addressed by Dr. Sayers J. Miller, Director of Student Health Service, Purdue University, who will discuss "The Tuberculosis Problem in Universities." Following this Dr. Alfred Friedlander, Dean of the College of Medicine of the University of Cincinnati, will talk on "Modern Methods in the Diagnosis of Pulmonary Tuberculosis."

On the following afternoon, April 14, beginning at 2:00 p.m., the Indiana Trudeau Society will hold its session with the State Tuberculosis Association and offers the following program illustrated with x-ray films:

"Unusual X-ray Lesions in the Chest," Oscar O. Miller, M.D., Medical Director Clinics, Louisville, Kentucky.

"Early Diagnosis and Collapse Therapy," O. T. Kidder, M.D., Resident Physician, Irene Byron Sanatorium, Fort Wayne.

"Two Interesting Cases of Tuberculous Pneumonia," C. J. McIntyre, M.D., Indianapolis.

"Basal Lesions," J. H. Stygall, M.D., Indianapolis.

Members of the Indiana State Medical Association are cordially invited to these sessions.

In addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories
Calcium Gluconate-Abbott
Ampules Calcium Gluconate 10%
Calco Chemical Co.
Acriflavine Neutral-Calco, Vaginal Capsules, ½ grain
Chappel Bros., Inc.
Chappel Liver Extract Concentrated (Intramuscular)
Vials Chappel Liver Extract Concentrated (Intramuscular) 3.3 cc.
Eli Lilly & Co.
Protamine, Zinc & Iletin (Insulin-Lilly)
Protamine, Zinc & Iletin (Insulin-Lilly), 10 cc.
Mallinckrodt Chemical Works, Inc.
Papaverine Hydrochloride
McNeil Laboratories
Tablets Digitalis Duo-Test McNeil, ½ grain
Tablets Digitalis Duo-Test McNeil, 1 grain
Tablets Digitalis Duo-Test McNeil, 1½ grains
Capsules Digitalis Duo-Test McNeil, 1½ grains.
Parke, Davis & Co.
Liver Extract (Intramuscular) Parke, Davis & Co., 10 cc. vials
Rare Chemicals, Inc.
Optochin Hydrochloride
Tablets Optochin Hydrochloride 0.1 Gm.
Schieffelin & Co.
Moller Plain Cod Liver Oil Standardized
Scientific Sugars Co.
Kinney's Yeast Extract Containing Vitamin B Complex
E. R. Squibb & Sons
Protamine Zinc Insulin-Squibb
Protamine Zinc Insulin-Squibb, 10 cc.

INDIANA UNIVERSITY NEWS NOTES

Dr. William Lowe Bryan, president of Indiana University since 1902, presented his resignation March fifteenth. Dr. Bryan has been named president emeritus. His successor has not yet been named.

The Dewey-Brayton scholarship of the Indiana University School of Medicine has been awarded to Harold E. Laws, of Milan, for this year. The scholarship, which consists of the interest on $1,000, is awarded annually to a first-year medical student of superior ability and in need of financial assistance. The faculty of the Indiana University School of Medicine at Bloomington made up the selection committee.

The scholarship was contributed by Miss Jenney B. Dewey, of Chicago, in memory of Alembert W. Brayton, who was for many years a member of the Indianapolis faculty of the Indiana University School of Medicine.

Dr. Burton D. Myers, dean of the Indiana University School of Medicine at Bloomington, addressed a meeting of the Northeastern Academy of Medicine at Kendallville February 25. Dr. Myers spoke to the Academy, which consists of approximately 75 physicians from four northeastern counties, on "The Autonomic Nervous System." Dr. Myers spoke March 9 on "Modern Treatment of Conditions Originating in the Autonomic Nervous System" before the Associated Physicians and Surgeons at the Union Hospital in Terre Haute.

Dean W. D. Gatch of the Indiana University School of Medicine in Indianapolis spoke February 24 before the monthly meeting of the Monroe County Medical Association in Bloomington. Dr. Gatch spoke on "Traumatic Injuries of the Abdomen," outlining their diagnoses and treatments by citing several cases of superficial, external injuries which were treated lightly but which later developed into serious internal injuries.

The Phi Rho Sigma, professional medical fraternity at Indiana University, held initiation services in Indianapolis March 20. A formal dinner and dance were held in connection with the initiation services. The following medical students were initiated: Mitchell Taylor, Indianapolis; Jack Shrader, Indianapolis; James D. Pierce, Indianapolis; Charles McVaughn, Pendleton; David Hadley, Indianapolis; Carl Kuehn, Muncie; Leo Connoy, Indianapolis; Clarence Ball, Waynetown, and Walter Twineham, Indianapolis.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION EXECUTIVE COMMITTEE

February 14, 1937.

Roll call showed the following present: C. A. Nafe, M.D., chairman; C. H. McCaskey, M.D.; E. D. Clark, M.D.; M. A. Austin, M.D.; A. F. Weyerbacher, M.D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary.

Upon the motion of Dr. McCaskey, seconded by Dr. Clark, Dr. Nafe was re-elected chairman of the Executive Committee for 1937.

The monthly statements of receipts and expenditures for the Association and THE JOURNAL for January were presented.

Membership Report

Number of members February 13, 1937	2,304
Number of members on February 13, 1936	2,050
Gain over last year	254
Number of members December 31, 1936	2,832

Budget Committee

The Budget Committee will meet the morning of the day upon which the Secretaries' Conference is held.

Treasurer's Office

According to Albert Stump, attorney for the Association, the Association is subject to the old age annuity tax but it is not subject to the unemployment insurance tax.

1937 Meeting at French Lick

(1) No definite arrangements made as yet for the scientific exhibit.

Graduate Education

(1) Dates for meeting set for May 10 through May 14, 1937.

(2) Minutes of the meetings of the Graduate Education Committee brought to the attention of the Executive Committee.

(3) Copy of the letter sent by the Committee to the district society officers offering to supply speakers at district meetings approved by the Executive Committee.

Secretaries' Conference

Date for Secretaries' Conference to be set for second or third week in March, according to the time which is most convenient for Dr. Charles Gordon Heyd, president of the American Medical Association, to attend.

Northwest Medical Conference

The Executive Committee authorized Dr. R. L. Sensenich, the Association's delegate, to invite the Northwest Conference to be the guest of the Indiana State Medical Association at its annual midwinter conference in 1938.

Legislative, Legal, and Social Security Matters

(1) State Legislature

1. Report made by Dr. Beatty upon the chiropractic bill, H. B. 297. The Committee approved Dr. Beatty's plan of asking the Health Committee for a public hearing at which Dr. Davidson, of Evansville, Dr. Norman Beatty, Albert Stump, and Dr. Gatch, dean of the Indiana University School of Medicine, will be the speakers in opposition to the bill.

2. Gross income tax exemption bill discussed by the Committee. Report made that the $3,000 exemption for retailers will not cover physicians.

3. Copies of the welfare bill, S. B. 173, which makes amendments to the Welfare Act, to be distributed to members of the Executive and Legislative Committees.

4. Report made of the introduction of a bill in the House which will set up a commission to determine upon the establishment of free medical clinics. This bill was introduced by Guernsey, representative from Lawrence county. Copies of this bill were made and sent to members of the Legislative and Executive Committees.

5. Garnishee bill. This bill was discussed and the Committee felt that the Indiana State Medical Association should have nothing to do with such a measure.

6. Bill introduced by Senator Bedwell having to do with a change in reporting vital statistics brought to the attention of the Committee. No action was taken by the Committee in regard to this bill.

(2) Congress

1. Letters from Dr. Fishbein and Dr. Woodward brought to the attention of the Committee. Both indicate that the administration will not attempt at this session of Congress to push any legislation having to do with the socialization of medicine.

2. Letters from congressmen acknowledging receipt of the resolution passed by the Council asking that the health service be not placed under a social service or welfare group brought to the attention of the Committee. These letters mostly were favorable to the position taken by the Council.

Resettlement Administration

(1) Letters from Dr. West and Dr. Woodward in regard to the tentative plan proposed by Dr. R. C. Williams, National Medical Director, Resettlement Administration, brought to the attention of the Committee.

(2) Report made to the Committee that Dr. Williams is to meet in joint conference in Chicago the secretaries of the Missouri, Ohio and Illinois societies, and a representative from Indiana. It is hoped that from this conference will come a uniformity of plans that may be adopted by each state medical society with the Resettlement Administration.

Socialization of Medicine

(1) Letter in which William Green, president of the American Federation of Labor, states his views in very definite terms against the socialization of medicine and in favor of each worker having the right to choose his own physician, read to the Committee.

Medical Economics

(1) Article in regard to fee splitting evils by Dr. Harold M. Hayes, president of the Association of Private Hospitals, New York City, brought to the attention of the Committee. The Committee gave wholehearted commendation to the article.

(2) Correspondence and telegrams in regard to the moving picture, "A Doctor's Diary," brought to the attention of the Committee.

Situation of Physicians in Flooded Areas

(1) The Committee had contemplated a donation to the Red Cross from the State Association, but as many physicians individually donated to the Red Cross and as county medical societies made generous donations, it was thought best that any State Association funds which are turned over for this purpose should be used to help rehabilitate any physicians that may have suffered losses as a result of the flood. Telegrams received from the councilors in answer to the question concerning the donation to the Red Cross brought to the attention of the Committee.

(2) Rehabilitation of physicians. It was moved by the Executive Committee that the councilors of those districts affected by the flood determine the amount of individual losses to physicians in their districts and the probable resources of all doctors who are so affected. In addition, individual questionnaires are to be sent to physicians in the district and the information received is to be held confidential.

(3) Letters received from Dr. West and various state society secretaries acknowledging information concerning flood that was sent to them from the headquarters office.

(4) Check and letter from George Crownhart, secretary of the Wisconsin State Medical Society, acknowledged by the Committee. The Committee instructed the secretary to write Mr. Crownhart thanking him and expressing deep appreciation for his wholehearted interest in the tragic situation that some physicians find themselves in in southern Indiana as a result of the flood.

(5) The Executive Committee approved the preparation of a special story on the flood which is to appear in the March issue of THE JOURNAL. The Committee went on record that no individual physician should be praised for his work during the flood but that the physicians living in southern Indiana and the volunteer physicians should be commended for their splendid efforts.

Syphilis Control Program

The following letter was sent by the headquarters office to the *Social Hygiene News*:

"For some time we have been receiving your *Social Hygiene News* and have found it very interesting. However, in this present issue, and I believe in most of the issues that have come to my notice, there has been a very painful lack of any recognition given to the doctors. You list all agencies and all cooperating groups and yet you fail dismally in your January issue in not listing any medical groups which are cooperating.

"The whole-soul cooperation of the medical profession is absolutely necessary for the social hygiene program to succeed or fail and I would regret to see your organization assume the attitude that so many lay organizations have assumed in the past of giving absolutely no recognition to the doctors, to the American Medical Association, and to the various component state and county medical societies."

This letter was approved by the Committee.

Membership Card

Sample membership card of the Minnesota State Medical Association brought to the attention of the Committee. Attached to this card is a blank to be filled out and sent in to the Minnesota State headquarters in case a malpractice suit is filed against the physician holding it. Although this is novel and interesting, the Committee felt that we should continue to use the present type of membership card.

A. M. A. Convention

Special train to American Medical Association convention. The Executive Committee felt that there should be no official special Indiana train but it suggested that THE JOURNAL carry the train rates as listed by the Pennsylvania and other railroads.

The Journal

(1) *Request for exchange with California and Western Medicine.* The Committee moved that THE JOURNAL be sent to the California State Medical Association and that the Indiana University School of Medicine receive gratis the *California Medical Journal* in exchange.

(2) Letter received from Dr. C. B. Drake, editor of *Minnesota Medicine*, regarding the tendency of some "throw-away" publications to reprint without permission material appearing in the more ethical medical publications. THE JOURNAL of the Indiana State Medical Association has been copyrighted since June, 1935, more than a year before the majority of state journals began copyrighting their magazines. So far as is known, articles from THE JOURNAL have not been reprinted without permission.

(3) The Committee approved the publication of material from the American Society for the Control of Cancer.

INDIANA STATE BOARD OF HEALTH

BUREAU OF COMMUNICABLE DISEASES

Monthly Report February, 1937

Diseases	*Feb. 1937*	*Jan. 1937*	*Dec. 1936*	*Feb. 1936*	*Feb. 1935*
Tuberculosis	151	247	117	116	111
Chickenpox	380	545	520	304	475
Measles	36	48	42	92	2,101
Scarlet Fever	738	909	648	1,460	1,049
Smallpox	17	33	12	3	7
Typhoid Fever	1	5	8	13	10
Whooping Cough	209	199	152	137	244
Diphtheria	36	103	91	136	130
Influenza	819	1,579	205	181	303
Pneumonia	184	325	104	165	57
Mumps	85	117	51	303	96
Poliomyelitis	2	0	0	0	1
Meningitis	21	14	14	12	7
Septic Sore Throat	1	0	0	0	0
Erysipelas	0	1	0	0	0
Encephalitis	0	0	0	2	0

33RD ANNUAL CONGRESS ON MEDICAL EDUCATION

The thirty-third annual congress on Medical Education and Licensure, held in Chicago, February 15 and 16, was in certain respects one of the most interesting programs of this body in recent years.

During the past two years an inspection has been made of every approved medical school of the United States. The Medical Schools of Canada voluntarily acceded to the inspection which was made under joint auspices of the Council and the Association of American Medical Colleges.

Herman G. Weiskotten, Dean, Syracuse University College of Medicine, made the inspection as representative of the Council. He was accompanied in every instance by a representative of the Association of American Medical Colleges. Three days were occupied in the inspection which involved actual examination of physical plant, consultation with the staff of each department and filling of a questionnaire.

A secret report will be made to each school showing by graph how that school ranks in comparison with other schools in respect to thirty or forty items accepted as important in medical school organization, medical teaching, etc.

The inspection will not be used in a reclassification or ranking of medical schools, but each school is given the advantage of this outside evaluation of its organization with opportunity to strengthen any weak elements of organization when strengthened financial support makes this possible.

The time devoted to the inspection plus the financial outlay necessary is a measure of the fine attitude of these two great bodies, the Council on Medical Education of the American Medical Association and the Association of American Medical Colleges in watchfulness over and strengthening of medical education in America.

Medicine is not taught anywhere in the world today in a way better than in America, nor is the student body anywhere more carefully selected.

The symposium on cancer covering the biology of cancer, the pathology of cancer and the teaching of cancer was particularly interesting.

Tuesday morning was devoted to a symposium on the "Selection of Students." The first paper had to do with primary mental abilities, the second with measurement of personality, and the third with the why, what and how of the aptitude test. This last paper was presented by Dr. Sollman, Professor of Pharmacology, Western Reserve University School of Medicine, Chairman of the Aptitude Test Committee.

Correlations are now available for two graduating classes, between showing on aptitude test and showing in the four years of the medical course. The evidence is overwhelming that the aptitude test is one of the most important elements in admission of students.

A great tribute was paid the medical profession by Max Mason, of California Institute of Technology, in his address on Medicine in Education. He said that what people most need is an education in a rational basis for living, and no group had contributed more to giving people a rational basis for living than the members of the medical profession. What he had in mind was that when you teach people and communities that malaria is not due to emanations from the soil but to a mosquito bite, and the disease may be avoided in a certain way, you give people a rational basis for action, for living. When you teach that typhoid is due to a certain microorganism taken into the body through water or milk—and may be avoided by boiling the water or milk—again you give a rational basis for action.

Examples may be multiplied. The total impact of these examples may not seem to be great but in reality, in the judgment of this great scientist, they are of immeasurable importance.

That this teaching does get across is shown by the remarkably few cases of typhoid following the great Ohio River flood, and by the fact that people came in hundreds asking for typhoid vaccination.

B. D. MYERS, M.D.,
Bloomington.

COUNTY SOCIETY REPORTS

BOONE COUNTY MEDICAL SOCIETY met at Lebanon at the Ulen Country Club, March second, for a noon dinner meeting. Dr. Frank M. Gastineau, of Indianapolis, was the guest speaker. His subject was "Common Skin Diseases."

* * *

CARROLL COUNTY MEDICAL SOCIETY held its regular monthly meeting at Camden, March eleventh, with Dr. Mathew Winter, of Indianapolis, as principal speaker. Dr. Winter's subject was "Recent Advances in Pediatrics." The February meeting of this society was postponed because of illness among the members of the society.

* * *

CASS COUNTY MEDICAL SOCIETY members held their regular monthly meeting at the Cass County Hospital in Logansport, March fourth. Dr. E. N. Kime, of Indianapolis, talked on "Medical and Surgical Diathermy."

* * *

DAVIESS-MARTIN COUNTY MEDICAL SOCIETY members met at the Daviess County Hospital in Washington, February twenty-third. Public health nurses attended and told of the work they are to do in Daviess County, and of the duties of the public health nurse.

* * *

ELKHART COUNTY MEDICAL SOCIETY members held their March dinner meeting in the Hotel Elkhart, March fourth. Dr. J. J. Kearns and Dr. A. VerBrugghen, of Chicago, talked on "Head Injuries."

* * *

FAYETTE-FRANKLIN COUNTY MEDICAL SOCIETY members met at the McFarlan Hotel at Connersville, March ninth. Dr. F. X. Siegel, of Cincinnati, Ohio, presented a paper on "Common Diseases and Injuries of the Eye." Attendance numbered fourteen.

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FLOYD COUNTY MEDICAL SOCIETY met in New Albany, March twelfth for a dinner meeting. Dr. Harry E. Voyles, of New Albany, talked on "Diagnosis of Gall Bladder Disease." Seventeen members were present.

* * *

FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY met in the Chamber of Commerce Building, Fort Wayne, March second, for a dinner meeting. Dr. Willis C. Campbell, of Memphis, Tennessee, talked to an audience of seventy-five physicians on "Treatment of Fractures of the Neck of the Femur." The discussion was opened by Dr. G. J. Garceau, of Indianapolis.

* * *

At the February sixteenth meeting of the Fort Wayne Medical Society, the meeting was held at the Methodist Hospital, and the program was presented by the staff. Cases were presented by Drs. D. D. Johnston, L. K. Gould, B. M. Edlavitch, Doster Buckner, Philip Bress and G. Ray Hill. Attendance numbered forty-four. The society endorsed the formation of an Anti-Venereal League.

* * *

FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY members met March eleventh, at Hillsboro. Dr. Lloyd H. Davis, of Crawfordsville, talked on "Infant Feeding During the First Year." Attendance numbered thirteen.

* * *

GIBSON COUNTY MEDICAL SOCIETY met at Princeton, March eighth to hear Dr. M. C. Topping, of Terre Haute, discuss "Fractures and Rehabilitation Following Injury." Eighteen members attended.

* * *

HENDRICKS COUNTY MEDICAL SOCIETY met at Danville, February eighteenth, with Dr. James Pebworth, of Indianapolis, as principal speaker. Dr. Pebworth discussed "Diseases of the Sinuses."

* * *

HOWARD COUNTY MEDICAL SOCIETY met at the St. Joseph Hospital, Kokomo, March fifth. Dr. A. K. Harcourt, of Indianapolis, talked on "Varicose Veins and Ulcers." Attendance numbered thirty.

INDIANAPOLIS (MARION COUNTY) MEDICAL SOCIETY members met February twenty-third in the Antlers Hotel. Dr. Philip S. Hench, of the Mayo Clinic, discussed arthritis, and held a clinic at the City Hospital in the afternoon.

At the March third meeting, Dr. W. D. Gatch led a symposium on anesthesia with Drs. Lillian Mueller, Clifford Jinks, C. W. Seikerman, Roy Geider and John Whitehead presenting papers.

Dr. Rudolph Schindler, of Chicago, demonstrated the use of the gastroscope at a clinic held in the Indianapolis City Hospital the afternoon of March ninth, and in the evening he explained its advantages to the members of the Indianapolis Medical Society at their regular meeting in the Antlers Hotel.

Case reports were presented at a meeting of the society March sixteenth. Speakers included Drs. William H. Norman, J. L. Fichman, Glenn Conway, Herbert F. Call, C. Basil Fausset, N. C. Davidson, Robert D. Howell and John Little, Jr.

* * *

JASPER-NEWTON COUNTY MEDICAL SOCIETY held a meeting at Kentland, February twenty-fifth. Dr. Matthew Winter, of Indianapolis, addressed the members, his subject being "Contagion in Children." Eighteen physicians and five nurses attended.

* * *

JAY COUNTY MEDICAL SOCIETY was addressed by Dr. John R. Brayton, of Indianapolis, at the meeting held in Portland, March fifth. Dr. Brayton's subject was "Common Skin Diseases and Their Treatment."

* * *

KNOX COUNTY MEDICAL SOCIETY members met at the Jewel Cafe in Vincennes, March ninth, for a dinner meeting. Dr. Charles N. Combs, of Terre Haute, presented a paper on "Modern Trends in Anesthesia." Miss Hazel Thompson, Knox County health nurse, presented a resume of her work during the past three months. Dr. Combs discussed the matter of administration of anesthetics by nurses.

* * *

KOSCIUSKO COUNTY MEDICAL SOCIETY met at the Hotel Hays in Warsaw, March ninth. Dr. E. V. Herendeen, of Silver Lake, talked on "Diuretics." Attendance numbered fourteen.

* * *

LAKE COUNTY MEDICAL SOCIETY members enjoyed a dinner meeting at Mercy Hospital, Gary, March tenth. Dr. Dean Lewis, of Baltimore, former president of the American Medical Association, was the principal speaker. His subject was "Differential Diagnosis of Bone Lesions." Approximately 125 physicians were present.

* * *

MADISON COUNTY MEDICAL SOCIETY members heard Dr. John H. Warvel discuss the advantages and disadvantages of protamine insulinate at their regular meeting, March fifteenth. The meeting was held in St. John's Hospital.

* * *

MARSHALL COUNTY MEDICAL SOCIETY members held a meeting at Plymouth, March third. Dr. L. A. Sandoz, of South Bend, was the principal speaker. Attendance numbered sixteen.

* * *

MONTGOMERY COUNTY MEDICAL SOCIETY members held a meeting at Culver Hospital in Crawfordsville, February eighteenth. Dr. Herbert F. Call read a paper on "Infant Feeding." Attendance numbered twenty-five.

* * *

MORGAN COUNTY MEDICAL SOCIETY officers for 1937 are:

President, W. J. Stangle, Mooresville.
Vice-president, Charles L. Aker, Mooresville.
Secretary-treasurer, George L. Sandy, Martinsville.

MUNCIE ACADEMY OF MEDICINE met at the Hotel Roberts, March ninth, for a dinner meeting, when Dr. Charles Mayo, of Rochester, Minnesota, addressed the members on "Surgery of the Colon."

PARKE-VERMILLION COUNTY MEDICAL SOCIETY members met at Clinton, February seventeenth. Dr. Don E. Kelly, of Indianapolis, presented a paper on "Diseases of the Skin and Syphilis." Attendance numbered twelve.

* * *

PERRY COUNTY MEDICAL SOCIETY held a meeting at Tell City, February twenty-fourth. Speakers included Dr. C. D. Hart, District State Health Officer of Michigan, and Dr. John W. Ferree, of the Indiana State Board of Health. The topic was "Public Health Work Under a Full-time Medical Director for the Various Units of the State." This was the first meeting of this society this year, other meetings having been postponed because of flood emergency work.

* * *

PORTER COUNTY MEDICAL SOCIETY met at Valparaiso February twenty-third. Dr. Hugh Kuhn, of Hammond, was the speaker: his subject was "Otitis Media."

* * *

PUTNAM COUNTY MEDICAL SOCIETY met March ninth at the Putnam County Hospital in Greencastle. Dr. Max Bahr, superintendent of the Central State Hospital in Indianapolis, was the guest speaker. His subject was "The Nature of the Mind Deranged."

* * *

SHELBY COUNTY MEDICAL SOCIETY members met at Shelbyville, March third. Dr. Jewett Hord, of Shelbyville, and Dr. M. F. Maisoll, of Morristown, presented papers on the diagnosis and treatment of scarlet fever. Attendance numbered eighteen.

* * *

ST. JOSEPH MEDICAL SOCIETY, at its February twenty-third meeting heard Dr. H. L. Cooper, of South Bend, discuss "Neurosis of the Colon—Irritable Colon." Attendance numbered forty-two. Plans were made to carry out an immunization campaign against diphtheria in May.

* * *

STARKE COUNTY MEDICAL SOCIETY met in Knox, March twenty-sixth. The newly appointed county nurses met with the physicians.

* * *

SULLIVAN COUNTY MEDICAL SOCIETY met at the Mary Sherman Hospital in Sullivan, March third, at 7 o'clock, for a dinner meeting. The members were dinner guests of Dr. W. N. Thompson. Dr. C. J. Clark, of Indianapolis, was the guest speaker; his subject was "Heart Disease." Twenty-one members were present.

* * *

TIPPECANOE COUNTY MEDICAL SOCIETY held its March meeting at the Home Hospital in Lafayette, March ninth. The afternoon program included Dr. DeLee's motion picture on "The Treatment of Asphyxia Neonatorum," a paper by Dr. Foster J. Hudson, of Indianapolis, on "Resuscitation of the Newborn," and a paper by Dr. David L. Smith, of Indianapolis, on "Episiotomy." Dinner was served in the main dining room of the Home Hospital, following which Dr. M. Edward Davis, of the University of Chicago, talked on "Treatment of Hemorrhage Late in Pregnancy." Dr. Gerald W. Gustafson, of Indianapolis, discussed Dr. Davis' paper. This special program was arranged through the Committee on Graduate Study of the Indiana State Medical Association and the Bureau of Maternal and Child Health of the Indiana State Board of Health. Attendance numbered approximately seventy-five.

VANDERBURGH COUNTY MEDICAL SOCIETY held a meeting at Evansville, March ninth, with Dr. W. R. Cleveland, of Evansville, as principal speaker. Dr. Cleveland's subject was "Modern Conception of Radiation Therapy." Attendance numbered thirty-eight.

* * *

WAYNE-UNION COUNTY MEDICAL SOCIETY met at the Richmond-Leland Hotel in Richmond, March eleventh, for a dinner meeting. Dr. Frank C. Walker, of Indianapolis, was the guest speaker. His topic was "Some Common Causes of Vaginal Discharge and Their Treatment."

* * *

WELLS COUNTY MEDICAL SOCIETY met February twelfth at Bluffton. Dr. C. J. Clark, of Indianapolis, spoke on "Cardiac Therapy."

CEREBROSPINAL RHINORRHEA

(Wurster)

(Continued from page 201)

was about six to eight drops per minute, and calculated upon such a basis, means that she was losing over one pint in twenty-four hours. The patient stated reassuringly that for over one year she is confident the rate of flow was over twelve drops per minute, as she was in the habit of counting it several times daily, using a watch. At the rate of twelve drops per minute, it would mean a loss of about 35.8 ounces in twenty-four hours. Drs. Bulson[4] in their report state that the maximum amount of fluid lost in twenty-four hours by any patient reported was thirty-two ounces. Then this case discharged the largest amount ever to be reported.

Howell,[5] in his text book of Physiology, states that the amount of cerebrospinal liquid found normally in the subarachnoidal space and the ventricles of the brain is difficult to determine, but it is usually stated to amount to 60 to 80 c.c. If these figures are correct, one can understand the rapidity of formation of the cerebrospinal fluid.

(4) The fact that meningitis has not occurred, in spite of the frequent manipulation procedures done. Campbell[6] says that eight cases are reported in the literature, in three of which death resulted from meningitis; in five there was recovery. In all the patients who lived, the flow of cerebrospinal fluid ceased within a few days or a few weeks at the most.

(5) The fact that she was aparently healthy and robust even with this unusual condition. The patient, because of her apparent good health and lack of other symptoms, and because little could be done in the way of treatment, refused to have the spinal fluid pressure taken and other studies made, such as basal metalbolic rate, etc.

221 East Third St.

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[5] Howell: Text Book of Physiology, 9th Edition, p. 623.

[6] Campbell, E. H.: Cerebrospinal Rhinorrhea Following Intranasal Surgery. *Ann. Otol. Rhin. Laryng.*, 37:867 (Sept.) 1928.

VOICE OF MEDICINE

(Reagan)

(Continued from page 216)

politician. The all-time health organization confesses and acknowledges the truth. There will be increased cost if it is permitted to operate, but owing to the fact that it would have a life-time job and life-time salary, it promises to off-set the greater part of this increased cost through its efficiency and coordination with other agencies in keeping more students in school, etc. This all sounds nice, but no office-holder would have such power or ability of coordination and neither would he possess any more ability to control an epidemic in a community than do the present health boards. The only difference we would notice between an all-time health board and our present board of health would be the life-time job and life-time salary feature and the increased cost of operation. In the end, there would be no more and probably not as good results as we are experiencing now. I appeal to members of the medical profession of the State of Indiana to *think*, and think seriously. Let your thoughts be guided by truth, right, and justice.

L. M. REAGAN, M.D.,
Kokomo.

BOOKS

BOOKS RECEIVED

LIGHT THERAPY. By Frank Hammond Krusen, M.D., Associate Professor of Physical Medicine, The Mayo Foundation, University of Minnesota. 238 pages. Cloth. Price $3.50. Paul B. Hoeber, Inc., New York, 1937.

* * *

OPERATIVE SURGERY. By J. Shelton Horsley, M.D., LL.D., F.A.C.S., attending surgeon, St. Elizabeth's Hospital, Richmond, Virginia; and Isaac A. Bigger, M.D., Professor of Surgery, Medical College of Virginia; with contributions by C. C. Coleman, M.D., John S. Horsley, Jr., M.D., Austin I. Dodson, M.D., and Donald M. Faulkner, M.D. In two volumes; 1387 pages with 1259 illustrations. Illustration by Miss Helen Lorraine. Fourth edition. Cloth. Price $15.00. The C. V. Mosby Company, St. Louis, 1937.

* * *

INTERNATIONAL CLINICS. A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles, edited by Louis Hamman, M.D., visiting physician, Johns Hopkins Hospital, Baltimore, Md. Volume I, Forty-seventh series, 1937. J. B. Lippincott Company, Philadelphia, Montreal, and London, 1937.

* * *

AN INTRODUCTION TO GENERAL PRACTICE. By E. Kaye Le Fleming, M.A., M.D., chairman of council, British Medical Association. 150 pages. Cloth. Price, $2.00. William Wood and Company, Baltimore, 1936.

NUTRITIONAL VALUES OF CANNED GOODS. Seventy-five abstract cards of articles on the nutritional values of canned foods have been prepared from literature on the subject; the abstracts discuss the vitamin and food essentials content of commercially canned foods; in some cases the disease-preventing qualities of certain foods are briefly discussed. Each card carries the reference from which the material was obtained. The cards are five by eight inches in size, and have been prepared by the American Can Company, 230 Park Ave., New York, from whom they may be secured upon request, without charge.

MATERIA MEDICA, TOXICOLOGY AND PHARMACOGNOSY. By William Mansfield, A.M., Phar.D., dean and professor of materia medica and toxicology, Union University, Albany College of Pharmacy, Albany, N. Y. 707 pages, with 202 illustrations. Cloth. Price $6.75. The C. V. Mosby Company, St. Louis, 1937.

* * *

THE SOCIAL COMPONENT IN MEDICAL CARE. A Study of One Hundred Cases from the Presbyterian Hospital in the City of New York. By Janet Thornton, director, social service department, and Marjorie Strauss Knauth, assistant physician, department of medicine. 411 pages. Cloth. Price $3.00. Columbia University Press, New York, 1937.

* * *

DISEASES OF INFANTS AND CHILDREN. By J. P. Crozer Griffith, M.D., Ph.D., emeritus professor of pediatrics in the University of Pennsylvania; and A. Graeme Mitchell, M.D., B. K. Rachford, Professor of Pediatrics, College of Medicine, University of Cincinnati. Second edition, revised and reset. 1153 pages with 293 illustrations. Cloth. Price $10.00. W. B. Saunders Company, Philadelphia and London, 1937.

* * *

PREOPERATIVE AND POSTOPERATIVE TREATMENT. By Robert L. Mason, A.B., M.D., F.A.C.S., assistant in surgery at the Massachusetts General Hospital. 495 pages with 123 illustrations. Cloth. Price $6.00. W. B. Saunders Company, Philadelphia and London, 1937.

* * *

MODERN TREATMENT AND FORMULARY. By Edward A. Mullen, M.D., assistant professor of pharmacology and physiology, Philadelphia College of Pharmacy and Science; foreword by Horatio C. Wood, Jr., professor of therapeutics in University of Pennsylvania, Graduate School of Medicine. 707 pages; flexible binding. Price $5.00. F. A. Davis Company, Philadelphia, 1936.

PATHOLOGY. By Eugene C. Piette, M.D., pathologist and director of clinical laboratories of the West Suburban Hospital, Oak Park, Ill. 263 pages, with 60 illustrations, some in color. Second revised and enlarged edition. Flexible binding. Price $1.75. F. A. Davis Company, Philadelphia, 1936.

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DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

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THE SELECTIVE TREATMENT OF SEPTIC ABORTION*

FRED J. TAUSSIG, M.D.

St. Louis

Abortion, the previable expulsion of the ovisac, usually is terminated spontaneously or by simple instrumental evacuation without bacterial invasion of the maternal tissues. Concerning the management of these clean cases, that usually have but a transient rise of fever, there is little argument. The majority of men would, if the patient were in the hospital and if there were evidence of retained tissue, proceed promptly to empty the uterus. Very different is the situation where an infection has taken place. By infection is meant more than the presence of bacteria in the uterine cavity; it means the invasion of these bacteria into the placental or maternal tissues.

Concerning the management of such infected or septic abortions the arguments have been heated and the differences of opinions most radical. There have been three camps. First, there were those extreme conservatives who, following Winter's experiences in 1911, declared that the greatest safety lay in a policy of non-interference; that nature would terminate the abortion spontaneously if we allowed sufficient time, and thereby we could avoid the spread of infection through instrumentation. A second group claimed as a result of extensive clinical experience that this was all wrong, infection tended to spread inward unless the retained material in which it grew was promptly and completely removed by operative intervention. A third group took an intermediate position, declaring that in most instances a delay of three to five days aided in limiting infection as shown by the frequent drop in fever to the normal, and that at this time the evacuation by operative means of the remaining portions of the ovisac could be safely made with great benefit to the patient.

I am presenting this to you not in the capacity of prosecuting attorney to advocate any one of these three methods, but rather in the capacity of judge or referee to see whether from this welter of contradictory advice we can work out some adequate compromise, some method of treatment that utilizes the best features of each group in accordance with the special conditions of the particular case. As against the conservative, the expectant or the active treatment, I would term this the *selective* treatment of septic abortion.

Before proceeding to the discussion of this method, I should like to give a brief abstract of four papers on this subject, published in the past six months. These four contributions comprise a total of 5,203 cases and by their number and careful analysis constitute the most important contribution to our knowledge of this subject from American sources. The reports come from Cleveland, New York, Baltimore and St. Louis hospitals.

J. L. Reycraft and S. S. Moore, Jr.,[1] analyze a total of 445 cases observed at the Cleveland City Hospital from 1932-1935. No therapeutic abortions were included and while many abortions were spontaneous the writers estimate that "70 per cent or more were induced by some sort of intrauterine manipulation." Wherever possible an opportunity was given for the abortion to be terminated spontaneously; consequently only 272 cases required operative intervention. There were 21 deaths (4.7%) but 7 of these 21 died within 24 hours after admission. It was noted that the greatest morbidity occurred where the cervix had to be dilated. Most important is the analysis of the infected abortions. This showed that when the intervention occurred within 24 hours of admission, there was a definitely greater morbidity than when operative intervention was delayed until forty-eight to seventy-two hours after admissions. Attention is called to the fact that some of the worst cases show relatively little temperature rise. "It is noteworthy," they say, "that the patient that shows slight or no fever, low blood pressure which cannot be explained by blood loss, feeble pulse and extreme prostration, almost always responds poorly to all therapy." Hemorrhage should preferably be controlled by ice-bag,

* Presented before the Indianapolis Medical Society, December 22, 1936.

[1] *Surg. Gyn. and Obst.*, June, 1936, Vol. 62, pp. 989-994.

ergot and pituitrin before rushing in to empty the uterus. The general tendency in treatment is toward a policy of non-intervention. However, if the abortion is still incomplete after the patient has been free of fever for 48 hours, they believe that nothing is gained by further delay.

W. H. Drane[2] gives the experience of five years (1930-1934) at the Kings County Hospital in Brooklyn, New York. There were only 20 deaths in the 1,971 abortions reported, but in this series only 279 patients (14%) admitted an instrumental interference. In the afebrile group there was no appreciable difference between morbidity and mortality in cases treated conservatively and those treated actively. On the other hand, in a total of 788 cases having a temperature of 100 degrees or more, there was a greater mortality in those treated conservatively (5.1%) as compared with those in which the uterus was emptied on admission (0.9%). The duration of the fever in cases treated conservatively was approximately three days longer than in those treated actively. The writers include in their figures for conservative treatment "those where the cervix does not admit an ovum forceps, where other gross pelvic pathology is present or where it is known that the uterus has previously been invaded." The fact that these seriously ill and complicated cases were all included in the conservatively treated group makes it illogical to deduce any conclusions in favor of active treatment. Drane employs a smooth ovum forceps wherever possible for emptying the uterus. He never uses a curette.

The largest group of cases reported is by C. H. Peckham.[3] Of 2,287 cases treated at the Johns Hopkins Hospital, Baltimore, from 1896 to 1934, 287 were therapeutic abortions and therefore not considered in the present analysis. Of the remaining 2,000 cases, there were 22 deaths. In approximately sixty per cent of these cases, operative measures were employed. Infection as shown in a temperature elevation to 100.4 degrees was noted in 21 per cent of the total series and was much more common in operative than in the spontaneous group. The deduction that Peckham makes from the experience of the Johns Hopkins Clinic is that the wisdom of a hands off policy has been substantiated in cases of infected abortion. Only in case of excessive hemorrhage should operative procedure be undertaken in such patients. Even in patients without fever, where previous intrauterine manipulation is suspected, it is better to wait twenty-four to forty-eight hours before proceeding actively. He recommends taking an intrauterine culture prior to operative procedure in any suspicious or frankly infected case. "The safety of digital as contrasted with instrumental curettage cannot be too highly emphasized," he says. The cultures showed some variety of streptococci in 75 per cent of the infected cases. Anaerobic streptococci were found in only 35 per cent of cases cultured. The clinic definitely favors a conservative policy of non-intervention in the presence of infection.

The fourth paper was prepared by T. K. Brown and G. A. Hunt.[4] This contribution is primarily a bacteriology study of 500 abortions observed at the St. Louis City Hospital, 200 of which showed negative cultures and the remainder showed a very high incidence of anaerobic streptococci, 92 per cent compared to Peckham's 35 per cent. Since Brown's study, however, was made from all abortion cases while Peckham's was limited to the infected ones, this difference in the anaerobic streptococci might mean that this organism is frequently present in the afebrile cases. In this connection it should be noted that Soule and Brown found anaerobic streptococci present in 40 per cent of normal vaginas. Brown takes up also the results of treatment which was uniformally active in all 500 cases. There were seven deaths, 1.4 per cent mortality. He calls this treatment "intrauterine culture and douche" but certainly the most important part of his treatment is the evacuation of the uterine contents with a sponge stick or ovum forceps. Unfortunately there is no subdivision of his cases into clean and septic ones. Positive cultures do not mean infection, as has been amply demonstrated on cultures from the post-partum uterus. This invariably active treatment unquestionably shortened the average stay in the hospital. Brown believes that every hour of delay in emptying the uterus adds to the dangers of spreading the infection. In the discussion following the reading of his paper, Brown emphasized that he does not do a curettage. He does not use the fingers for evacuating the uterus since he thinks this manipulation will disseminate the infection.

I will not attempt to reconcile the apparently contradictory opinions expressed in these four reports but merely wish to re-iterate that they constitute a valuable addition to our experience.

The first requisite in any plan of treatment for septic abortion, particularly one that claims to be selective, is to be careful to segregate the clean from the infected cases. When is a case infected, or probably infected? This is by no means easy to answer. To arrive at a diagnosis we must not leave a stone unturned in our questioning, our examinations, and other tests. Upon a correct answer will depend very often the success or failure of our plan of treatment.

In the first place, we would stress a careful history in each case. A sudden copious bleeding before the onset of pains is suggestive of instrumental interference. In spontaneous abortion there is usually some backache and cramping in the lower abdomen associated with or followed by a

[2] *Am. Jour. of Obst. and Gyn.*, June, 1936, Vol. 31, pp. 1029-1034.

[3] *Surg. Gyn. and Obst.*, July, 1936, Vol. 63, pp. 109 to 115.

[4] *Am. Jour. of Obst. and Gyn.*, Nov., 1936, Vol. 32, pp. 804-811.

slight show of blood and only later attended by profuse bleeding. Tactful questioning will often elicit a history of interference, particularly if the patient is made to feel that the statement is confidential and will not lead to criminal prosecution. The patient must be told that the plan of treatment depends upon this answer and that if she tells a falsehood, it may result in serious consequences. Fear of legal procedure still plays an important part in these answers, for patients will not hesitate to confess to induced abortions in the past, but are evasive or falsify about instrumental interference in the present case. In this questioning the doctor should not assume the part of a prosecutor. He is not primarily concerned with who did the instrumentation, but whether instrumentation was done. A few minutes of tactful questioning will often elicit the truth.

It is also important to get accurate information concerning duration of the pregnancy, for the plan of treatment will depend largely upon the size of the uterus. Date of last menses, onset of nausea, and breast symptoms, onset of pressure symptoms on bladder, all help in this diagnosis. The normal mechanism of expulsion of the ovum varies greatly in accordance with the duration of the pregnancy. In the first two months, the fetal membranes and decidua come away piece-meal, whereas in the middle trimester of pregnancy the placental cake is usually either expelled or retained as a whole.

The physical examination of the septic aborption patient includes temperature, pulse, and general condition to begin with. If the temperature remains over 100.2 degrees for more than 24 hours, the diagnosis of infection seems probable, but it is occasionally true that even with a normal temperature we may have rapid pulse and prostration pointing to severe infection. High fever falling promptly to normal is not unusual in the so-called sapremic cases where a protein reaction rather than infection is the cause of the temperature rise. A classification of septic cases merely on the basis of fever would, therefore, lead to errors.

Before making a pelvic examination with sterile gloves in abortion cases it is essential that the vulva be shaved and thoroughly cleansed and the bladder be completely emptied by catheterization. Serious infections may result if the doctor fails to observe these simple aseptic precautions. Catheterization is advised because so many nervous patients fail to empty the bladder completely by voiding and thereby interfere with the exact determination of the size of the uterus and the surrounding pathology. By a combined recto-vagino-abdominal examination we now make out the condition of the cervix (softness, dilatation), the size of the uterus and the presence of placental tissue hanging within the cervical canal. Most important is the determination of an extension of septic infection into the broad ligaments, the tubes or peritoneal cavity. Bogginess to either side of the uterus associated with tenderness points to such an invasion. Thrombosed veins can be recognized by their peculiar earthworm-like structure. In certain cases these will be definite evidence of a peritonitis or pelvic abscess. Needless to say, such a bimanual examination must be made with as much gentleness as possible to avoid a possible spread of infection.

In every instance a complete blood count should be made, including a Schilling differential, to determine whether there is leukocytosis or a shift to the left. In the presence of juvenile forms and markedly increased "stab" count we must assume virulent infection. A blood culture, if positive, may be of diagnostic and prognostic value. Red-blood counts, hemoglobin determination and blood grouping are helpful in the management of cases with considerable blood loss that might need transfusion.

Finally we should, where proper laboratory facilities are available, determine the nature of the infecting organism, by introducing a vaginal speculum to expose the cervix and taking a uterine culture, together with the Ruge-Philipp virulence test. The latter consists of growing the bacteria in the defibrinated blood of the patient. The presence of hemolytic streptococci, hemolytic staphylococci or the anærobic streptococcus putridus should make us hesitate to employ active measures. In order to utilize the results of such bacteriologic tests, however, a delay of 2 or 3 days will be required and some men claim that such a delay may at times be harmful.

Before coming to any conclusions as to the management of a case we must, therefore, if possible, have made three important decisions: (1) whether or not the case is septic; (2) how severe and extensive is the infection; (3) the physical condition of the uterus (size of cavity, amount of material retained and degree of cervical dilatation). In accordance with these findings, we should select the method that is best suited to the handling of the particular case.

Without attempting to include every possible situation, we can subdivide our plan of treatment according to these special conditions into five main groups.

Group I. *Cases associated with hemorrhage.* By hemorrhage is meant more than free bloody discharge; rather, it means an amount that seriously depletes the strength of the individual. This should not merely be measured quantitively but also with an eye to previous blood loss and the general physical condition of the patient. In less depleted cases ergot, pituitrin and ice-cap to the lower abdomen should be tried for a few hours in order to avoid the necessity of intra-uterine interference. There is, however, almost unanimous agreement that in septic abortion complicated by hemorrhage that is not promptly controlled by medication, the uterine cavity should be instrumentally emptied of its contents.

GROUP II. *Cases associated with peri-uterine infection.* An equal unanimity of opinion exists regarding the handling of cases in which there is positive or probable evidence that the infection has spread beyond the limits of the uterine cavity. An absolute "hands off" policy is here certainly the best. Not until some time later, when the peri-uterine infection has completely subsided, is a gentle removal of remaining placental tissue justified. The management of septic peritonitis and other infections beyond the limits of the uterus is a chapter to itself and cannot here be discussed.

The cases that do not fall under the two preceding heads have been separated into three groups on the basis of the size of the uterus: those with a uterine cavity of less than 3½ inches in depth, those with a uterine cavity that measures between 3½ and 5 inches and those measuring more than five inches in depth. I have preferred the size of the uterus to the duration of the pregnancy as a basis of classification, since it is the size of the uterus that determines the method of attack, and this may vary at any particular month in accordance with the amount of material still retained in the uterine cavity. In general, the expectant-active treatment has been accepted as giving the best results in these septic abortions where hemorrhage or peri-uterine infection does not compel a different method of attack. This expectant-active treatment implies a delay of between two to seven days to allow the temperature to fall to normal with possible spontaneous evacuation of the uterine contents, followed by instrumental removal of remaining tissue at the end of that time, unless a second examination should show peri-uterine involvement.

GROUP III. *Uterine cavity less than 3 1/2 inches in depth.* In these less advanced pregnancies, the uterine walls are still moderately thick, the placental site less extensive, the amount of retained material less in amount. If the cervix is dilated to admit an ordinary sponge forceps, a delay of 48 hours will usually be sufficient to permit evacuation of the uterus without danger of spreading infection. If, however, the Schilling blood picture and the intra-uterine culture taken on admission point to a virulent infection, no intra-uterine manipulations are advised. An incompletely dilated cervix at this stage of pregnancy can usually be handled by metal dilatation at the time the uterus is to be emptied. Wiping the uterine cavity gently with a cotton pledget soaked in half strength tincture of iodine before and after emptying the uterus will reduce uterine infection.

GROUP IV. *Uterine cavity 3 1/2 to 5 inches deep.* With a uterus the size of a grape-fruit, chances for perforation and a spread of infection are greater. Hence a longer delay is advisable before resorting to active measures. I advise waiting from four to five days in such cases, or even longer if the temperature remains elevated. The larger the cavity and the greater the amount of material retained, the more careful must we be that the cervix is properly dilated. A gauze strip soaked in alcohol introduced through the cervix, draining the uterine cavity for 24 hours preceding evacuation, helps to soften and dilate the canal. Evacuation by means of a sponge forceps can usually be readily affected, but if the cervix is dilated enough to admit a finger, palpation of the uterine cavity and the digital loosening of placental remnants greatly lessens the chance of an incomplete removal of tissue and the risk of perforation by instruments.

GROUP V. *Uterine cavity over 5 inches in depth.* These are the cases belonging to the second trimester of pregnancy. Conservative treatment, allowing in some instances up to a week for spontaneous evacuation, is here to be preferred. Ergot, quinine and pituitary extracts will usually suffice to produce expulsion of the placenta in toto. To diminish uterine infection and stimulate uterine contractions we recommend the gentle aseptic introduction of a gauze drainage strip, 8 cm. in width, soaked in alcohol, through the canal to the uterine cavity according to the method of Zangemeister. These strips should be changed daily for a few days. If it is finally necessary to loosen and remove the placenta, it is better to introduce one or two fingers into the uterus for this purpose, aided if necessary by an ovum forceps after the material has been detached from the uterine wall. In these digital manipulations it should, however, be constantly remembered that we must be even more gentle in septic abortions than in uninfected cases.

With this selection of methods varying according to the special conditions of each case, we can, I believe, materially reduce maternal mortality even though the average stay of patients in the hospital may be a few days longer.

From the standpoint of technique, I would add a few suggestions. We must differentiate between hospital and home treatment. Needless to say, we must do all in our power to have abortion patients transferred to hospitals, for I would definitely classify the evacuation of the septic uterus as a major operation, when done under the unfavorable conditions of light exposure and cleanliness in the home. Conservative treatment, except in uncontrollable hemorrhage, is definitely to be preferred in unhospitalized patients.

General anesthesia can usually be avoided. Morphine-hyoscine semi-narcosis, the use of barbiturates or avertin, with the addition of a whiff of nitrous oxide gas if necessary, will almost always suffice. I hesitate to use local anesthesia in the presence of infection of the uterus.

The sharp curette is to be avoided in septic abortions. The blunt curette in the shape of a loop is, in my experience, less effective than the large spoon. Most effective I find the ordinary sponge forceps which is introduced gently to the fundus,

then opened up and rotated along the uterine wall for 90 degrees in each direction to loosen the retained ovisac. The simultaneous lateral pressure at two points in the uterine cavity reduces to a minimum the chance of perforation. When this rotation has been done a few times the forceps are slightly withdrawn and the loosened pieces are removed. This can be repeated until no more tissue comes away. Never should the forceps be used to remove adherent placental tissue. Only in a minority of the cases will it be necessary to use the finger as an aid to evacuation, since most septic abortions are induced abortions and most induced abortions occur in the first two months of gestation.

SUMMARY

(1) A careful and complete examination, including laboratory tests, is necessary to diagnose the presence of infection, the virulence of the infection, and its possible spread beyond the limits of the uterine cavity.

(2) Contradictory clinical experiences between the results of conservative and active treatment are partly due to bias on the part of the obstetrician, partly to failure to differentiate in treatment according to the special conditions of the case.

(3) By dividing the cases of septic abortion into five groups according to extent of infection, size of uterine cavity and bleeding, we can apply a "selective" method of treatment that enables us to utilize active or expectant measures in accordance with the individual need of the case.

ABSTRACT

PROTEIN, SALT AND FLUID CONSUMPTION OF 1,000 RESIDENTS OF NEW YORK

From their study of 1,000 cases Benjamin I. Ashe and Herman O. Mosenthal, New York (*Journal A. M. A.*, April 3, 1937), feel that the minimal requirement in a study of protein, salt and water consumption is the twenty-four hour sample of urine. The patient's statement and even his record of food consumed may be very misleading. Thus they cite a patient with Bright's disease who believed himself to be on a low protein diet but who was found to be deriving more than 100 gm. of protein daily from bread, cereals and cheese. Many people eat less than 45 gm. of protein daily. Of the 1,000 subjects, 60 per cent were found to be eating 42 gm. or less of protein daily. The evil effects of such a course have been pointed out. The majority of the individuals studied were found to take a low protein (42 gm. or less), moderately high salt (from 4 to 8 gm. or more), and moderate fluid (1,000 cc. or more) ration. There is no relation between protein, salt and water intake. While the normal individual eating a low protein diet tends to have a low blood pressure and a low hemoglobin per centage, the normal person eating a high protein diet has no increased blood pressure and his hemoglobin is normal. The high protein diet has less effect in raising the blood urea nitrogen than has a low fluid intake. People with hypertension do not habitually eat more protein or more salt than normal persons. There is no evidence to show that a low protein diet, followed by a hypertensive subject, will materially reduce the blood pressure provided there is no anemia.

BOWEL OBSTRUCTION DUE TO GALLSTONES*

(WITH REPORT OF THREE CASES)

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Bowel obstruction from any cause still carries with it a very high mortality, and in many instances, such as obstruction resulting in gangrenous bowel, or obstruction caused by malignancy, surgical relief is at best dangerous or only temporary. Since in bowel obstruction due to gallstones these two serious complications are usually absent, the surgical relief of this trouble is simple and comparatively safe, provided only that the obstruction be recognized early and relieved without delay. To emphasize the relative frequency of this type of bowel obstruction, a few points in its early diagnosis, and the ease and safety of its relief when recognized early is the chief aim of this article.

The history and findings in one case seen only at autopsy, and of the two cases operated on by the author, follow:

Case Number 1. A married woman, age 65, had had "gallbladder trouble" for many years, had never been jaundiced and never was operated on. Her present illness began in the summer of 1911 with abdominal pain similar to that in previous attacks; later the pain shifted to different parts of the abdomen, became cramp-like in character, and was accompanied by increasing nausea, stercoraceous vomiting, obstipation, and distention. Repeated enemata were inffectual. A terminal failing circulation and marked distention closed the picture twelve days after the onset of present illness. A diagnosis of bowel obstruction from an unkown cause had been made. The author was asked to make the post-mortem examination.

The bowel obstruction was found to be due to a faceted gallstone, one inch in diameter, lodged in the terminal ileum (Fig. 1, A). The stone could not be forced easily through the ileocecal valve. One smaller faceted stone was present in the ileum, proximal to the obstructing stone. No gangrenous bowel was present. The stones had entered the duodenum through a fistula from the gallbladder. The adhesions between the gallbladder and duodenum were so delicate that they gave way to the slight pressure of the examining hand and several small faceted gallstones with thick black bile poured through the gallbladder fistula spontaneously.

Case Number 2: On May 1, 1929, a woman, 64 years of age, was admitted to the hospital, complaining of pain and vomiting. She gave the history of having had indigestion and "heart burn" over a period of years. Two years before admission, she had been told she had gallbladder colic

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and had required morphine for relief on a number of occasions. Patient had been operated on for hernia over thirty years ago. She had had no other surgery.

Her present illness began two days before admission with what seemed to be an attack of her type of "gallbladder colic." However, the pain soon became much different in character, was felt lower in the abdomen and accompanied by severe abdominal cramps with nausea and vomiting. The cramps and vomiting increased in severity and the vomitus was the brown, foul-smelling liquid type associated with small bowel obstruction. Repeated enemata were given but the complete obstruction persisted. No gas was expelled and the return water was clear.

On examination the patient was found to be in fair condition with pulse of 100 and temperature of 99 degrees. She was quite obese, weighing 176 pounds, and at intervals was in great distress with cramp-like abdominal pain now in the lower part of abdomen. Only moderate abdominal distension was present but there was definite general rigidity of the abdominal wall and borborygmus. Previous inguinal hernia operation scar was present. Pelvic examination disclosed nothing abnormal.

A liter of normal saline solution was given subcutaneously and, under spinal anesthesia, a low midline incision was made. The small bowel was moderately distended; dense adhesions were found in the region of the gallbladder. On further abdominal exploration, a hard lump was felt in a loop of bowel, which was drawn into the incision. The bowel above the obstructing mass was moderately dilated; that below was completely collapsed. The bowel surrounding the enclosed foreign body was firmly contracted about it, making a complete obstruction. However, the bowel at no place showed any evidence of impaired circulation. The foreign body, which proved to be a non-faceted gallstone, was removed through a linear incision opposite the mesentery. The incision was closed longitudinally with two rows of fine silk. The gallstone measured 1 inch by 1 1/16 inches in diameter and was lodged near the ileo-cecal valve (Fig. 1, B). A small rubber drain was left in place for a few days. There was a moderate drainage and slight infection at the site of the drain, but the patient made a very rapid and complete recovery.

During the past seven years subsequent to operation, the patient had been in good health with no symptoms referable to her former gallbladder trouble until the winter of 1936, when she had one attack of pain in the right hypochrondrium somewhat suggestive of gallbladder origin. In this case, it appears that the gallbladder fistula has closed completely. At least, an x-ray examination made seven years after her operation showed the gallbladder well filled and distended with the opaque dye. It emptied slowly after the fat meal. (Fig. 2).

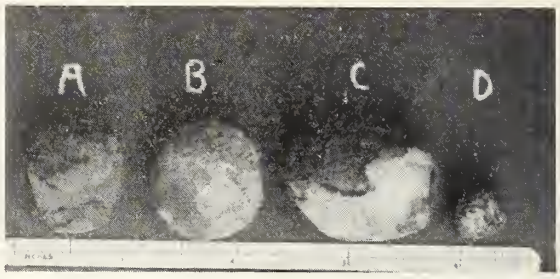


Fig. 1. A. Gallstone removed from the ileum in Case 1.
B. Gallstone removed from the ileum in Case 2.
C. Gallstone removed from the small bowel in Case 3.
D. Gallstone vomited just before enterotomy for removal of obstructing gallstone "C."

Case Number 3: A woman, aged 51, was admitted to the hospital on December 10, 1930. Her complaint was abdominal pain and vomiting. She stated that for a period of five years previous to the present trouble she had been in good health, but previous to that time and over a period of years, she had had very severe attacks of what her physician had told her were gallstone colics and they necessitated the use of morphine and ocassionally a general anesthetic for relief. She had had no previous surgical operations and had never been jaundiced.

Her present illness began the day before admission with severe pain in the right hypochondrium. After a few hours, the pain became most marked in the left side of the abdomen, was paroxysmal in character, required several hypodermic injections of morphine for relief, and was accompanied by vomiting of considerable amounts of foul-smelling, brown fluid. No gas or bowel movements had been expelled normally since onset of her present illness. Repeated enemas gave no relief.

On examination the patient was seen to be a very obese woman who at intervals apparently suffered greatly from attacks of severe abdominal pain. During the intervals, between attacks, the abdomen was quite soft and only moderately distended. There was more tenderness to pressure over the left half of the abdomen than on pressure over the gallbladder region. No masses or strangulated hernia was found. No operative scar was present.

The diagnosis of small bowel obstruction appeared quite positive and in view of the very definite history of preceding gallbladder trouble and the similarity of the history and findings to those of the preceding case, a possible diagnosis of gallstone ileus was made.

The patient was prepared for operation and a spinal anesthetic was given. About 5 minutes after the procaine solution was injected into the subarachnoid space, the patient became rather nauseated and vomited forcibly a few times. A foreign body was heard to strike the emesis basin and, on examination, it was discovered that the patient had vomited a faceted gallstone ½ inch

in diameter. (Fig. 1, D.) After some consideration, it was decided that the almost positive diagnosis of bowel obstruction could not be explained by the presence of such a small stone anywhere in the intestinal tract. Accordingly, the abdomen was opened through a left rectus incision, since most of the abdominal pain was on that side. On exploring the abdominal contents, a hard mass was encountered in a loop of small bowel. A complete bowel obstruction existed at this point, the proximal bowel being dilated with gas and some fluid contents and the distal bowel being completely collapsed. The hard mass, which proved to be a gallstone, was firmly held by the contracted encircling bowel wall and could not be dislodged. As in the preceding case, the bowel wall was everywhere in good condition. With the usual care to prevent soiling, the stone, which measured 1 inch by 1¾ inch (Fig. 1, C), was removed through a linear incision in the bowel wall and the latter was closed, also longitudinally, with two layers of fine silk. On further examination, the gallbladder was found densely adherent to adjacent tissue and was not disturbed. The abdominal wall was closed without a drain. The patient with the usual care made a good recovery and was discharged well on the twenty-fourth day. There was, however, some drainage from the incision, but it was well healed at the time of the patient's discharge.

This patient was seen recently and has been well and entirely free from her previous gallbladder trouble since the operation, a period of nearly 5 years.

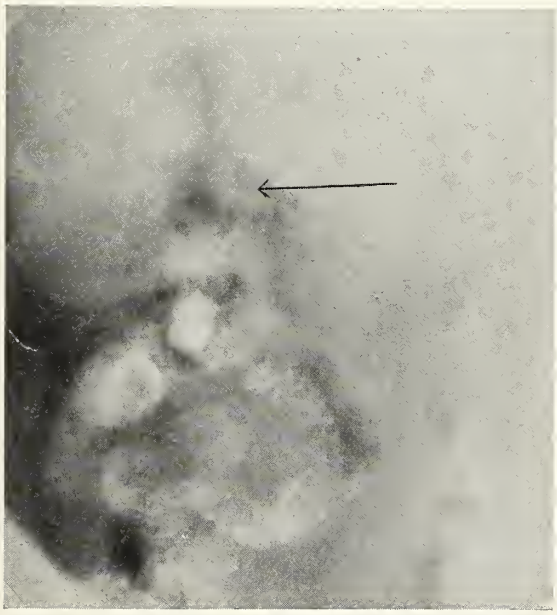


Fig. 2. Roentgenogram of gall-bladder taken September 25, 1936, of patient reported as Case 2. Stone "B" in Figure 1 sloughed out of this gallbladder in 1929, causing complete bowel bostruction. The fistula from the gall-bladder to the bowel is apparently closed at present time.

COMMENTS

The relative frequency of gallstone ileus has been the subject of some investigation. In a series of 61 cases of mechanical ileus, excluding strangulated hernias, operated on by the author, the obstruction was due to gallstones in two instances, i. e., gallstone ileus accounted for 3.3 per cent of the total. During the same period, 144 gallbladder operations were performed.

A review of the literature shows that gallstone ileus is many times more frequent in women than in men.

Barnard[1] reported 3 personal cases and gave a summary of 5 other cases of gallstone ileus collected from the records of the London Hospital in the years 1893-1901, out of a total of 360 cases of bowel obstruction, an incidence of 1 to 45.

Wakeley and Willway[2] in personal and collected cases reported an incidence of .4 to 1.7 per cent.

Duschl[3] in reporting his two personal and other collected cases, gives the incidence varying from 1 to 5.3 per cent of total ileus cases.

Wagner[4] reported an analysis of 334 cases on record up to 1914. He states that gallstone ileus is still "eine avis rara," even for surgeons of wide experience.

Frank Martin[5], of Baltimore, reported 3 personal cases and gave an excellent discussion of the subject. He quoted Bloodgood as stating there had been but one case of gallstone ileus among 280 bowel obstructions cared for at the Johns Hopkins Hospital, the Union Protestant Infirmary, and St. Agnes Hospital. Martin, by personal communication with 28 prominent surgeons, got reports of but 16 cases, of which 11 died and 5 recovered.

That this subject is still alive is confirmed by the fact that there are about 50 references to articles on it in the 19 volumes of the *Quarterly Cumulative Index Medicus*, covering the past nine years. The actual incidence, however, is much higher than these figures might indicate, since certain cases are not recognized and others recognized are not always reported as such. For example, in the discussion of gallbladder disease, McClure[6] mentions incidentally that he has operated on two cases of gallstone ileus.

The mortality still is very high, as in other types of ileus. However, if recognized early, surgical treatment should be safer than in many other types of ileus in which gangrenous bowel or a malignant tumor must be excised. Wagner[4] ana-

[1] Barnard, H. L.: Intestinal Obstruction Due to Gallstones. *Annals of Surgery*, Vol. 36, p. 161 (1902).

[2] Wakely and Willway: Intestinal Obstruction by Gallstones. *British Journal of Surgery*, Vol. 23, p. 377 (1935).

[3] Duschl, L.: Zur Pathogenese und Therapie des Gallensteinileus. *Deutsche Zeitschrift fur Chirurgie*, Vol. 240, p. 724 (1933).

[4] Wagner, A.: Ileus durch Gallensteine. *Deutsche Zeitschrift fur Chirurgie*, Vol. 130, p. 353 ((1914).

[5] Martin, Frank: Intestinal Obstruction Due to Gallstones. *Annals of Surgery*, Vol. 55, p. 725 (1912).

[6] McClure, R. D.: Discussion. *Annals of Surgery*, Vol. 103, p. 881 (1936).

lyzed 334 cases. Among these there were 93 spontaneous cures, 82 cases verified by post-mortem examination and of the 159 operated on, there were 95 deaths and 60 recoveries, the outcome in four cases not being given. This mortality of over 60 per cent is about the average.

In the 3 cases reported here, and in most others, there is a definite and almost unmistakable history of preceding gallbladder disease. In cases reported by McWhorter[7], Rankin and McKeithen[8], Webb,[9] Jackson, and Ewell[10], and Gutmann[11], there was a definite or very suggestive history of previous gallbladder disease. On the other hand, Vidgoff[12] and Skemp and Travnicek[13] and others rather emphasize the fact that often no such history is obtained.

As to the type of anesthetic to be used, there is a difference in opinion. The author used spinal anesthesia mainly to avoid the possibile complications of vomiting and aspiration. The importance of preliminary duodenal drainage, as recommended by Wangensteen[14] and others in recent years cannot be over-estimated. This reduces the necessity of draining off the contents of the dilated bowel at the time of operation, and, also, makes the use of a general anesthetic less dangerous. Meyer and Spivack[15] prefer ether anesthesia in intestinal obstruction while Moss and McFetridge[16] attribute a lower mortality to the use of spinal anesthesia.

Gallstones sufficiently large to cause bowel obstruction nearly always gain entrance to the lumen of the bowel through a fistula from the fundus of the gallbladder. Stones less than one inch in their smallest diameter rarely cause obstruction. Most of the obstructing stones are only one inch or a little over in their smallest diameter, though they may have another much greater diameter. A facet on a stone means that another stone is or has been present and requires the surgeon to satisfy himself that no obstructing stone is left in the bowel. A stone may remain in the lumen of the bowel for some time if it causes only intermittent or incomplete obstruction. One case was reported by Barnard[1] in which there was reason to believe from the history that the stone remained in the small bowel 10 years, and in another case reported by Mast[17] a stone was probably present in the bowel for one year.

Gallstones are occasionally vomited. One such case was reported here by the author. Another similar case is reported in an article by Horace Jeaffreson.[18] Marshall and Heitmeyer and Swanton[19] give the history and findings in a patient who also vomited gallstones.

Several writers believe that in most instances the fistula, through which the obstructing stone reached the bowel, remains patent. That occasionally a fistula closes completely is confirmed by x-ray examination of one case reported here in which, seven years after operation, the gallbladder is shown well distended with the opaque dye. (Fig. 2.)

SUMMARY

1. The purpose of this report is to emphasize the frequency of gallstone ileus and the need for its early recognition.

2. There is given herewith the history and operative findings in two such cases with recovery and subsequent x-ray study of the gallbladder. A third case, seen only at autopsy, is also reported. In one of the cases operated on, a gallstone one-half inch in diameter was vomited a few minutes preceding the operation.

3. In 61 cases of mechanical ileus, excluding strangulated hernias, operated on by the author, the obstruction was caused by gallstones in two instances, a frequency of 3.3 per cent. Due mainly to the early recognition of the obstruction, both of these cases recovered. During this same period, 144 gallbladder operations were performed. This frequency of gallstone ileus and the increasing mortality following delayed recognition is emphasized by a review of the current literature.

4. The gallstones gain entrance to the intestinal tract through a fistula from the gallbladder. The shortest diameter of the obstructing calculus is about one inch. Apparently larger stones seldom gain entrance to the bowel and smaller ones do not cause obstruction. X-ray study of one case 7 years after operation shows the gallbladder to fill and empty normally.

5. A gallstone ileus should be strongly suspected in any patient, especially a woman, in whom an acute small bowel obstruction develops suddenly after an exacerbation of chronic gallbladder disease.

WAYNE PHARMACAL BUILDING.

[7] McWhorter, G. L.: Acute Obstruction of the Small Intestine Due to Gallstones. *Archives of Surgery*, Vol. 19, p. 915 (1929).

[8] Rankin and McKiethen: Gallstone Ileus. *Kentucky Medical Journal*, Vol. 22, p. 236 (1924).

[9] Webb, R. C.: Gallstone Ileus. *Minnesota Medicine*, Vol. 12, p. 416 (1929).

[10] Jackson and Ewell: Acute Intestinal Obstruction Due to a Large Gallstone. *Wisconsin Medical Journal*, Vol. 29, p. 637 (1930).

[11] Gutmann: Ileus Due to Migrating Gallstone. *American Journal of Surgery*, New Series, Vol. 30, p. 348 (1935).

[12] Vidgoff: Acute Intestinal Obstruction Due to Gallstones. *American Journal of Surgery*, New Series, Vol. 29, p. 458 (1933).

[13] Skemp and Travnicek: Gallstone Obstruction of Bowel. *American Journal of Surgery*, Vol. 31, p. 166 (1936).

[14] Wangensteen, O. H., and Paine, J. R.: Treatment of Acute Intestinal Obstruction by Suction with Duodenal Tube. *Journal of A. M. A.*, Vol. 101, p. 1532 (1933).

[15] Meyer and Spivack: Intestinal Obstruction. *Annals of Surgery*, Vol. 100, p. 148 (1934).

[16] Moss and McFetridge: Acute Intestinal Obstruction. *Annals of Surgery*, Vol. 100, p. 158 (1934).

[17] Mast, H. M.: Recurrent Intestinal Obstruction Due to Gallstones. *American Journal of Surgery*, New Series, Vol. 32, p. 517 (1936).

[18] Jeaffreson, Horace: Ulceration of the Ileum and Fatal Peritonitis from Encysted Gallstone. *The British Medical Journal*, May 30, 1868.

[19] Marshall and Heitmeyer and Swanton: Intestinal Obstruction due to Gallstones. *Wisconsin Medical Journal*, Vol. 30, p. 18 (1931).

DISCUSSION

Franklin E. Hagie, M.D. (Richmond): This subject is of great interest, and I believe the condition is far more common than we realized at first. As to diagnosis, I think it is very seldom made prior to operation. We make a diagnosis of ileus and go in and find a stone. I think Dr. Cameron is to be congratulated on making a diagnosis of ileus with stone in his second case. In discussing this paper I wish to cite two cases upon which I have operated, because they form a contrast to the two cases upon which Dr. Cameron has operated. My patients were a man of 57 and a woman of 60. It does not occur as often in men. When these patients entered the hospital, neither one had had previous abdominal surgery. The man had been sick for four days at the time of entrance and the woman had been ill for ten days. Both came in with fecal vomiting and were desperately sick. I gave them as much liquid as possible to increase their chances of going through the surgical procedure. I operated on both. In the man the stone was lodged at the ileocecal valve and I could not express it back up the ileum. I removed the stone which measured one inch in diameter. The two circumferences were four inches and three and one-quarter inches, and the small diameter was one-inch. In the case of the woman the stone was larger, but it had not lodged at the ileocecal valve. There was not as severe ileus as in the case of the man. This stone was lodged in the ileum at some distance from the ileocecal valve. It acted in the nature of a ballvalve. It worked down and pressed against the smaller muscles. I could express that stone back. I was able to bring it back to where the bowel was not involved and removed it. This stone was one and three-sixteenths inches in diameter. Both of my patients died from the extreme toxemia of the illness. Dr. Cameron was able to get his cases earlier and his results were far better. We all know that the earlier we get these cases the better the results. I also had the misfortune to have ten years intervene between my two cases. Nevertheless, I hope to make a diagnosis of gallstones causing ileus. I think if we realize that it can occur, and keep it in mind, we will be more apt to make a diagnosis the next time we see a case of ileus due to gallstone.

D. F. Cameron, M.D. (closing): It will be interesting and valuable to know how many other members of this Surgical Section have encountered gallstone ileus in practice. (Twelve members so signified.)

Error.—On page 184 of the April issue of The Journal, Dr. Franklin Young, of Terre Haute, was credited with a discussion of Dr. Sise's article on "Anesthesia" when it should have been credited to Dr. J. R. Yung, of Terre Haute. The same error occurred in the published minutes of the Section on Anesthesia in the November, 1936, issue, page 614.

THE MEDICOLEGAL AUTOPSY*

FRANK FORRY, M.D.
Indianapolis

The subject assigned me was "The Detection by Autopsy of the Causes of Sudden Death, When Due to Natural Causes."

The most casual reflection shows that the scope of this subject is too broad to receive comprehensive treatment in a short time paper. Numerous aspects of the subject suggest themselves for discussion, and of these I wish to bring to your attention a few which, it seems to me, most merit your study.

What do we mean by the word autopsy? What are its connotations?

Autopsy is derived from Greek roots, the literal meaning of which is *I view* or *I inspect*. Another term used synonymously with autopsy is necropsy. This is likewise a Greek derivative. Its literal meaning is "to view or inspect the dead." Parenthetically, let me state that this latter term is the form preferred by the editorial department of the American Medical Association. The term in common usage is post-mortem. The dictionary tells us that these terms may be used synonymously, and that they mean a "*dissection* of a dead body for definite purposes."

Permit me to emphasize the word "dissection" in this definition. Dissection means the careful taking apart and inspection of tissues and organs of the body. It means that this taking apart be carried out in a precise and painstaking manner. A dissection is *not* a cut and slash orgy. There are well established and generally accepted principles governing this procedure and the deductions derived therefrom. It implies that accurate and complete records are made. Of course, the purpose of the dissection is obviously to gather reliable and useful data. To accomplish this end the dissector avails himself of all those aids now obtainable. Causes of death are not always readily determined as a result of careful inspection and dissection, although the dissector be the most experienced of us all. He subjects each organ and tissue to microscopic study which may either corroborate or negate his observations. Frequently it adds new data. In some instances laborious bacteriological examinations are indicated. In others serological studies are indicated, and in still others elaborate and time consuming chemical studies. All of these procedures and many others, every one highly technical and having a firm basis in well established scientific principles, have their place in the autopsy. I am confident you will agree with me that, in the light of these facts, the medicolegal autopsy is not an ordinary simple procedure to be undertaken by the inexperienced. In short, to be acceptable, it can be nothing less than a highly scientific inquiry with a definite purpose, conducted by a trained expert.

* Part of a symposium presented before the first Indiana Medicolegal Conference held at Indianapolis, December 4, 1936.

A second aspect of the subject for consideration suggested by our discussion topic has to do with causes of death. You will note that it is limited to *natural* causes of death. What are natural causes? It is most difficult to phrase a concise statement here. However, we understand that this group comprises all those deaths which are non-violent, which are devoid of trauma, and concerning which there are no ante-mortem clues. Death comes suddenly and unexpectedly. This includes the man who collapses and dies at his work, or who is picked up on the street in syncope; a Pullman occupant found dead in his berth. The remaining members of this group are well known to you. It needs no further exposition. It is this group that we are asked to consider by your committee, and rightfully so, for it is this group that comprises the larger number of cases requiring investigation by coroner or medical examiner. A statistical study made recently by Schultz[1] revealed that 49% to 59% of all deaths reported to three medical examiners' offices and two coroners' offices were deaths due to natural causes occurring suddenly and unexpectedly.

What does the modern medical autopsy show to be the common causes of sudden, unexpected death? Where are these causes found? What is their relative incidence? Our necropsy studies show that diseases of the heart and aorta lead the list.

THE IMPORTANT NATURAL CAUSES OF SUDDEN DEATH AND THEIR PERCENTAGE INCIDENCE

A Study of 700 Cases (After Hamman[2])

1.	Diseases of heart and aorta	72%
	Diseases of coronary arteries	40%
	Valvular diseases	12%
	Myocardial diseases	8%
	Diseases of aorta (aneurysm)	12%
2.	Diseases of lung	10%
3.	Diseases of brain	8%
4.	Miscellaneous: all other causes	10%

Note that of these diseases, those encountered in the arteries supplying blood to the heart muscle (coronary arteries) account for the larger portion of heart deaths. The disease is of such a nature that the blood supply is very materially diminished or entirely stopped. This condition produces the fatal outcome.

One etiological factor deserves consideration here. The first inch of the long artery, the aorta, through which all blood to all tissues passes from the heart, is a favorite residence of the organisms causing syphilis. Here it grows, destroys tissues, and as a result, produces evidence of syphilitic disease. The arteries supplying the body's vital pump take their origin from this area. The effect of the syphilitic disease is to narrow or close entirely these heart arteries. This area of the large artery just leaving the heart, the site of this disease, has sometimes been metaphorically called the Circle of Venus. The implications are perfectly obvious, and I think it can be stated further, speaking figuratively, that sometimes the Circle of Venus strangles the heart of its victims.

The remaining diseases occurring in the heart which may produce sudden fatalities are diseases of the valves, diseases of the muscle, and diseases of the aorta (the single large servicing artery). They are arranged in the order of relative frequency of occurrence. From these facts you see that heart disease, including aneurysm, accounts for about 72% of all cases of sudden, unexpected death.

Our necropsy studies show further that another group of sudden, unexpected deaths is due to diseases or vascular accidents in the lungs. Here the fatal outcome is the result of hemorrhage produced by various causes. More frequently it is due to embolism. For the non-medical part of our audience let me state that under certain circumstances during life a clot-like mass forms in the blood. In most instances this mass is attached to the vessel wall. Frequently it loosens and then moves with the current. It is perfectly obvious that its chief danger lies in its arrest by some vessel. Such arrest occurs in the large vessels supplying the lung. If it is large enough to plug the artery to a lung or that supplying both lungs, a sudden, unexpected *exitus letalis* occurs.

Ranking third in this list are diseases of the brain. Diseases of the brain are almost always ultimately fatal, most of the cases progressing slowly to the fatal termination. This is quite contrary to the popular belief that diseases of the brain cause a relatively large number of unexpected sudden deaths. Our observations indicate that the number is relatively small. Indeed it is responsible for approximately 8% of sudden, unexpected deaths. In almost all these cases the actual cause of death is due to some abnormality of the arterial supply to the organ. The abnormality is of such a nature that sudden massive hemorrhage occurs, or that an artery supplying a vital brain center is suddenly plugged.

You will note by referring to the table that approximately 90% of sudden, unexpected deaths result from disease of the heart and its immediate vasculature, from diseases of the brain, and from diseases of the lung. The remaining 10% constitute a miscellaneous group. The disease processes which have been found and regarded as causes of these sudden, unexpected deaths constitute a formidable list. Among others it includes the following:

Massive hemorrhage into stomach or bowel resulting from some destructive disease process, i. e., ulcer or cancer.[3]

Hemorrhage into the adrenals noted more fre-

[1] Schultz, O. T.: *Amer. J. Surg.*, 30:148, 1935.

[2] Hamman, L.: *Bull. Johns Hopkins Hosp.*, 55:387, 1934.

[3] McNamara, F. P.: *J. Iowa M. Soc.* 26:150, 1936.

quently in children[4 5] than adults.[6]

Acute edema of larynx.[7]

Infections: the unusual cases, in which in most instances economic circumstances made the death appear as sudden and unexpected. This includes pneumonia;[8] peritonitis[8] frequently secondary to perforated appendix; acute inflammatory pulmonary edema;[9] pulmonary tuberculosis.[10]

Diaphragmatic hernia.[11]

"Status lymphaticus," death resulting from hemorrhage from congenitally hypoplastic cerebral vessels.[12]

Et cetera.

A third and final question is suggested by our discussion subject. It is a practical and, therefore, an extremely important one. It is this: How successful in determining the cause of death is the modern, scientific autopsy? To answer this question I appeal to experience, and experience answers emphatically that in some few cases there is no demonstrable cause for unexpected death. Doctor Harrison S. Martland at Essex County, Newark, New Jersey, who is the most experienced worker in this field, and who has at his disposal the best equipped laboratory, told us just recently that in 2% of his investigations he was unable to discover a cause of death. The experience of autopsy surgeons in Scotland places the figure at 8%. The significant fact is that sudden, unexpected death occurs without detectable cause—veritably it is an act of God.

SUMMARY

1. The modern medicolegal necropsy is a *scientific inquiry*. It can be nothing less than this.

2. Diseases of the heart account for approximately 65% of all sudden, unexpected deaths.

3. The effects of latent syphilis account for approximately 20% of all sudden deaths.

4. Finally, the medicolegal autopsy does not demonstrate the cause of death in all cases. It fails in a few.

[4] Henderson, J. A., & Pettigrew, F.: *Brit. M. J.* 1:14, 1932.
[5] Simpson, C. K.: *Guy's Hosp. Gaz.*, 50:83, 1936.
[6] Severn, A. G. M.: *Lancet*, 1:647, 1923.
[7] Darb, R. O.: *Mil. Surgeon*, 78:287, 1936.
[8] Bedford, T. H. B.: *J. Path. and Bac.* 36:333, 1933.
[9] Pund, E. R.: *J. M. A. Georgia* 24:252, 1935.
[10] Jaso, J. V.: *Am. J. Surg.* 29:457, 1935.
[11] Hamilton, I.: *Australian & New Zealand J. Surg.*, 5:181, 1935.
[12] Symmers, D.: *Am. J. Surg.*, 26:7, 1934.

READ THE POSTGRADUATE PROGRAMS ON PAGES 258 TO 261, INCLUSIVE

DEATH FROM RABIES FOLLOWING PASTEUR TREATMENT

CASE REPORT

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A veterinarian, aged fifty-two, white, consulted me on March 7, 1937, complaining of extreme nervousness, difficulty in swallowing, and a painful numbness of the left hand and forearm.

The history obtained from the patient and his wife was that while treating a dog, January 24, 1937, the patient was severely bitten on the left hand and forearm, one or two bites penetrating the finger tips. There were minor lacerations on the right hand. The dog was believed to have rabies, and was killed by the patient after this incident. No examination was made of the dog's brain, but the patient said that he was positive that the dog had rabies.

First aid treatment was administered by the patient himself, and consisted of the use of antiseptics and washing. No cauterization was done. Pasteur treatment was started two days later, and consisted of fourteen doses of anti-rabies vaccine intramuscularly, administered by the patient himself. No symptoms were noticed until about March 2, when the patient stated that he had some numbness and tingling in the left hand and forearm which lasted for a day or more, then pain developed in the region of the left hand and arm. Generalized nervousness was noticed, and the patient seemed to realize that he had rabies. This caused him much mental confusion and worry. About March 4, he developed some difficulty in swallowing, particularly true for water. This condition progressed until on March 7, at the time of consultation, he could take only a small spoonful of water, and that with the greatest difficulty and effort. There was apparent paralysis of the muscles of deglutition.

The patient was advised to enter the hospital but refused to do so. An attempt was made to control his nervousness and convulsions by sedatives per rectum which had little result. By midnight of March 7, he became maniacal and abusive to his family. There were periods of violence and outbursts of uncontrollable temper when restraint was necessary.

The patient was admitted to the hospital at 9 a. m., March 8, and convulsions were controlled by the use of sodium amytal per rectum. Intravenous glucose, 1,000 c.c., was administered and repeated every six hours. He remained rather quiet during that day, but convulsive seizures occurred during that time even when the skin was touched with an alcohol sponge. On the following day, March 9, the same treatment was continued, but more powerful sedatives were required to control the convulsions which had a tendency to recur

more frequently. At 2 p. m., March 9, the temperature began to rise and gradually increased until death occurred at 9 p. m., when the temperature reached 107 degrees per rectum. The immediate cause of death was respiratory and cardiac paralysis.

Laboratory findings, while in the hospital, were as follows: Urine showed about 10 per cent sugar (thought to be due to intravenous glucose); otherwise urine was negative. Blood Wassermann was negative. Blood pressure was 150/90 on admission. The State Board of Health laboratories reported an examination of the brain to be positive for rabies, and the examination was confirmed by guinea pig inoculation.

CONCLUSIONS

First aid treatment was not emphasized in this case as it should have been, in that no cauterization of the wound was done. It is important that every case of dog bite, particularly when there is any suspicion of rabies, should be carefully cauterized with nitric acid, and Pasteur treatment should be started immediately.

THE EXAMINATION OF PATIENTS FOR EVIDENCE OF CANCER

Following many requests from various sections of the country, the American Society for the Control of Cancer releases the following "Ten Golden Rules of the Cancer Examination." These rules were prepared by Dr. Frank E. Adair, Memorial Hospital, New York, in cooperation with Dr. Burton T. Simpson, Director, State Institute for the Study of Malignant Disease, Buffalo, New York, and Dr. James Ewing, Director, Memorial Hospital, New York.

"The positive finding of any of the symptoms which are sought in this examination," the Society said, "does not necessarily mean that cancer is present, but they are suggestive and may later lead to cancer. Their discovery will probably be followed by a recommendation of a visit to a surgeon, a radiologist, or a cancer specialist.

"These rules are offered as a guide and aid for laymen, not as a complete final judgment. A cancer will rarely escape detection if the Ten Golden Rules of the Cancer Examination are observed."

The Ten Golden Rules of the Cancer Examination follow:

"1. Examine the lips, tongue, cheek, tonsils and pharynx for persistent ulcerations; the larynx for hoarseness, and the lungs for persistent cough.

"2. Examine the skin of the face, body and extremities for scaly bleeding warts, black moles and unhealed scars.

"3. Examine every woman's breasts for lumps or bleeding nipple.

"4. Examine the subcutaneous tissues for lumps of the arms, legs and body.

"5. Investigate any symptoms of persistent indigestion or difficulty in swallowing. Palpate the abdomen.

"6. Examine the lymph node system for enlargement of the nodes of the neck, groin, or arm pit.

"7. Examine the uterus for enlargement, lacerations, bleeding or new growths.

"8. Examine the rectum and determine the cause of any bleeding or pain.

"9. Examine the urine microscopically for the presence of blood.

"10. Examine the bones, and take a radiograph of any bone which is the seat of a boring pain, worse at night."

RECENT ADVANCES IN THE PHYSIOLOGY OF THE ANTERIOR PITUITARY HORMONES AND THEIR CLINICAL APPLICATION*

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In the last few years clinical endocrinology, through advances made in modern experimental biology, has progressed sufficiently far that it behooves all of us to inquire into the physiology and clinical application of this phase of general medicine. The subject, however, is so extensive that only one aspect of it will be covered in this paper, namely, the anterior pituitary hormones.

The efforts of experimental biology have been directed toward the study of under- and over-function of the anterior hypophysis in the various laboratory animals and attempts have been made to apply these investigations clinically. Because the hoped-for success on the clinical side has not been completely realized from the brilliant and even spectacular results of the research workers, it does not necessarily follow that all of our new knowledge of experimental endocrinology should be discarded as wasted effort. Perhaps, with patience, with increased insight into the actions of the hypophyseal hormones, and with their production on a more pure and potent basis, clinical landmarks might also be reached which are undreamed of today.

It is difficult to conceive that the anterior portion of this very small gland, the hypophysis, located at the base of the brain, secretes the some eight or ten hormones that have been ascribed to it. Unfortunately, research workers are prone to claim the discovery of an additional principle when viewing a new result rather than describing a multiplicity of actions to one principle. Anyway, experimental evidence suggests the existence of several anterior pituitary hormones, namely: (1) the growth, which governs our skeletal growth and development; (2) the gonadotropic, which controls sexual maturation and activity; (3) the thyrotropic, which is the controlling principle over thyroid gland activity; (4) the lactogenic, which initiates and continues lactation following pregnancy; and (5) a group of agents, for want of a better name, termed metabolic, which through their action on the liver, pancreas and adrenal glands, influence carbohydrate and fat metabolism.

An almost unsurmountable problem, again, is the mechanism of action of these anterior pituitary hormones. Any attempt to extract them from animal pituitary glands results in a very minute yield; therefore, storage in the gland seems improbable. Continuous secretion by the hypophysis would necessitate an unphysiological mechanism as

* Presented before the Section on Medicine of the Indiana State Medical Association at the South Bend Session, October 7, 1936. From the Lilly Research Laboratories.

"resting periods" are generally considered necessary for secretory activity. Likewise secretion into the blood stream calls for great dilution of the hormone, although this route of action is very definite as exhibited by ovulation in a transplanted ovary after an intravenous injection of the anterior pituitary gonadotropic factor. Possibly a logical mechanism of action of these hormones is over a nervous pathway, the autonomic nervous system. It is not too improbable to conceive of the anterior pituitary gland, bathed in cerebral spinal fluid, secreting its hormones directly into this medium, which comes in intimate contact with sympathetic and parasympathetic nerve-controlling cells located in the hypothalamus. Such a route of activity has a minimal dilution of the pituitary products and a maximal rapidity of action. But the most inexplicable observation of all is why these various hormonal products, secreted at one location, exhibit selective action for certain, and only for certain, types of cells distally situated. Such is another of nature's riddles which remains unanswered.

The relationship of the anterior pituitary hormones to clinical medicine can probably be best discussed by taking up the individual hormones separately, by discussing their under- and over-functions in experimental animals, and by applying these observations to clinical syndromes.

THE ANTERIOR PITUITARY GROWTH HORMONE

One of the greatest achievements of experimental physiology is the production of dwarfism and sexual infantilism by complete removal of the hypophysis. In fact hypophysectomy in animals causes cessation of activity and atrophy of all the glands of internal secretion. Stasis in the growth of the long bones can be confirmed by x-ray and the body weight remains unchanged or slightly lessened, whereas feeding these hypophysectomized rats or puppies anterior pituitary extracts readily produces growth and increase in weight. Even giant rats, normally proportioned, twice their usual weights and sizes and comparable to a 10 to 12-foot human being, have been reported by Evans following extensive anterior pituitary extract therapy, and acromegalic distortions can be observed in some adult dogs so treated.

Possibly all forms of human dwarfism are in some manner associated with defective anterior pituitary function. Cretin dwarfs are caused from subthyroid activity, which in turn is dependent upon insufficient pituitary activity, while deficiency of the growth hormone in adult life is exhibited in Simmonds' disease, a cachectic, rapidly wasting state associated with complete destruction or sclerosis of the hypophysis. The other so-called hypo-pituitary states, Frohlich's syndrome, etc., are probably not primarily hypophyseal in origin, but are associated with hypothalamic dysfunction.

Clinical use of the growth hormone in the treatment of dwarfism has been reported by several investigators with some indication of resumption of growth. One point, however, must always be observed before instituting any clinical growth hormone therapy, and that is the epiphyses of the long bones must not have closed. If the epiphyses have already ossified, no further growth can be expected, and possibly only acromegalic features will result from continued therapy. Several obstacles still hinder clinical growth hormone treatment: (1) the hormone has never been crystallized as have none of the anterior factors and therefore contains considerable foreign material; (2) the yield of the extract from fresh pituitary glands is very small and as yet it is impossble to produce commercially; (3) the present extracts are very unstable and can therefore be used only experimentally.

Over-production of the growth factor has clinically been associated with acromegaly for many years, and autopsy generally exhibited hypertrophy of the anterior pituitary with increased eosinophile cells. It is, however, gratifying to have this observation confirmed by experimental physiology, the production of symmetrical gigantic rats and acromegalic dogs following extensive pituitary treatment.

THE ANTERIOR PITUITARY GONADOTROPIC HORMONE

This principle, commonly called the sex-stimulating factor, acts primarily on the ovary and testis; only through these glands does it stimulate ovarian and testicular hormonal secretions which cause growth, maturation, and activation of the secondary sexual organs. If anterior pituitary extracts or implants are given to immature animals, their ovaries or testes develop precociously, with liberation of ova and sperm, and of the ovarian and testicular hormones which in turn cause development of the vagina, uterus, endometrium and breasts in the female and the phallus, prostate and seminal vesicles in the male. Aschheim and Zondek extended their observation of this gonadotropic activity to the urine of pregnant women and so was developed the Aschheim-Zondek and other tests for pregnancy. The urinary principle, however, is not identical with the pituitary factor, but because of its easily available source and purification it has found a very wide commercial use.

The hypophyseal gonadotropic factor may be divided into two principles: (1) the gametogenic, which stimulates primarily the germ cells, ova and granulosa cells in the female and sperm in the male; and (2) the luteinizer, which acts predominately on the connective tissue derivatives—the theca cells of the ovary and the interstitial cells of the testis. The gametogenic principle is found most abundantly in postmenopausal or castrate urine, while the luteinizer is present in large amounts in human pregnancy urine, in chorio-epitheliomas and testicular tumors and their urines and in the blood serum of pregnant mares during the middle third of their gestation.

As with all the other anterior pituitary hormones, this gonadotropic principle has not been isolated

in any degree of purity, its yield from fresh tissue is very small, and even though more stable than the growth factor, the ovarian and testicular changes in the lower animals produced by its therapy cannot be duplicated in the human or even in monkeys. Fortunately, however, ovarian and testicular hormones themselves are readily available from natural and synthetic sources, in crystalline purity, and within reasonable cost of production, so there is little wonder that substitutional therapy with the hormones from the ovary and testis, just as with thyroid extract, has replaced the anterior pituitary gonadotropic factor in the majority of clinical cases. The ovarian follicular hormone, estrone, is in wide use in the treatment of menopausal symptoms and in gonorrhoeal vulvovaginitis of childhood; progesterone, the corpus luteum hormone, is employed in the treatment of idiopathetic uterine bleeding, in primary dysmenorrhoea, in threatened and habitual abortion and in relief of "after-pains"; the testicular principle, testosterone, has not found any immediate application as yet; only in clinical conditions where there is hypo-development of the ovaries or testes themselves, as in hypogonadal sterility (lack of ovulation or of spermatogenesis) or in cryptorchidism, where primary gonad stimulation is required, is the anterior pituitary gonadotropic hormone employed.

THE ANTERIOR PITUITARY THYROTROPIC HORMONE

This principle, like any other anterior hypophyseal factor except the growth hormone, requires the presence of its end or terminal gland to be effective; complete thyroidectomy obliterates any and all of its specific effects. Conversely hypopituitary states are invariably followed by hypothyroidism so that cretinism and myxedema, in the presence of the thyroid gland, might very well be due to hypopituitarism. On the other hand the administration of this principle over 7 to 8 days to normal animals—guinea-pigs and rats—results in enlargement and hyperplasia of the thyroid, increase in the basal metabolic rate (30 per cent), in the heart rate, exophthalmos and depletion of liver glycogen, all clinical manifestations of hyperthyroidism. The yield of this hormone from fresh pituitary glands is small, it is not active by mouth as are none of the other pituitary principles up to the present time, it is easily destroyed by boiling, and has not been prepared in any high degree of purity. Even with this thyrotropic principle available in limited amounts, it seems reasonable to presuppose that hypothyroid conditions will continue to be treated by substitutional therapy, by thyroid extract itself, and not by a stimulator of the thyroid gland.

THE ANTERIOR PITUITARY LACTOGENIC HORMONE

In 1932 this principle was isolated in a sufficient degree of purity to demonstrate its lactogenic properties and the names "prolactin" and "galactin" were given it. There is no experimental or clinical evidence as yet available to demonstrate that this hormone does anything more than to initiate and excite milk secretion. Mammary tissue growth and development is apparently outside its scope of activity, although the breast must first be "primed" with the ovarian hormones of pregnancy before the lactogenic factor can become effective. During pregnancy the breasts undergo development; estrone stimulates the mammary duct system while progesterone and the luteinizing hormone cause development of the alveolar processes. Apparently prolactin is being suppressed by these hormones. After parturition, with delivery of the placenta, the estrogenic and luteinizing hormonal levels fall rapidly, permitting the release of the lactogenic principle which initiates the secretion of milk.

As with the other anterior pituitary hormones, the lactogenic principle has been produced in only a moderate degree of purity, its yield is small, and its clinical activity only indifferently tested. The clinical future for such a principle is limited; it possibly could be used to initiate lactation when absent or to stimulate increased milk secretion when supplementary feedings are required. Indeed dairymen may find a much greater use for this product than clinicians.

THE ANTERIOR PITUITARY METABOLIC HORMONES

Various names and identities have been ascribed to this group which play an important role in carbohydrate, fat and protein metabolism. Adrenotropic, diabetogenic, pancreatropic, and ketogenic terms have been suggested, but due to the lack of any definite isolation and their closely allied actions, the group as a whole can be more conveniently discussed.

One of the most outstanding observations dealing with metabolism in general, and carbohydrate metabolism in particular was made in 1924 by Houssay. This investigator showed in diabetic dogs —animals whose pancreas had been removed and who required large amounts of insulin for survival —that hypophysectomy bettered the diabetic condition to such an extent that these animals could live six months or more without insulin. Such an observation, spectacular as it was, was readily confirmed and therefore suggested that diabetes was no longer a condition limited alone to pancreatic insufficiency. Such animals, hypophysectomized and depancreatized, became known as Houssay animals. In addition to ameloriation of the diabetic condition, these dogs were shown to be extremely sensitive to insulin. Subsequently Long and Lukens have shown that adrenalectomized-depancreatized cats react similarly to the Houssay dogs, and so the adrenal cortex, exclusive of the medulla, is associated as an intermediate mechanism in carbohydrate metabolism. These experimental findings became extremely significant in view of the clinical pictures in Addison's disease with destruction of the adrenal cortical tissue and the concurrent hypoglycemia, and in acromegalics, due to hyperpituitary activity, and the often associated hyperglycemia and glycosuria. Such observations also

fit in nicely with Himsworth's insulin-sensitive and insulin-resistance diabetics. In the former, which occur in young patients and who often run a rapid and fatal course, true pancreatic island insufficiency is suggested, while in the latter, the insulin-resistant type, in whom the condition appears around the menopausal age, when the pituitary is known to hypertrophy and to increase in activity, an extrapancreatic, an hypohyseal, type of diabetes may be the explanation.

An anterior pituitary ketogenic principle, that is a fat metabolic hormone, has been described which is said to increase acetonemia and simultaneously to diminish neutral blood fats. It, however, has never been completely separated from the pituitary growth and thyrotropic principles, so its identity is still undetermined. Again, in the Houssay animals, the hypophysectomized-depancreatized dogs, conversion of fats into carbohydrates is materially interfered with, even to the extent that such animals fed solely on a fat diet died similarly to starved Houssay animals, although a protein or carbohydrate diet readily permits survival.

SUMMARY

A very general description of some of the newer physiology of the anterior pituitary hormones is described; interpretation of these physiological activities as pertaining to clinical medicine and future endocrine therapy is offered. The present disappointing results from hormonal treatment do not warrant, however, discontinuing experimental biology, which should be viewed as a very important source of newer endocrine knowledge and as a means of production of more pure and potent hormonal products, with which clinical landmarks, undreamed of today, can be conquered.

DISCUSSION

M. V. Kahler, M.D. (Indianapolis): As pointed out by Dr. Witherspoon, the part played by the anterior pituitary, that of the "master gland," is truly amazing. The interrelationship of the endocrine glands is so complicated that we must give a certain amount of time to this study, if we are to have in mind certain fundamental principles which are essential to diagnosis and therapy.

This subject may be divided into three parts: physiology, pathology, and therapy. Our knowledge of physiology is still incomplete. However, the many brilliant discoveries made during the last ten years in this field constitute one of the outstanding achievements of modern medicine.

I shall limit my discussion to the female sex hormones. This experimental work has been done with mice, rats, rabbits and to a small extent with monkeys. Unfortunately, the sexual cycle of the lower animals is simple compared to the complicated menstrual cycle of the human. Out of the entire animal kingdom only humans and old world monkeys menstruate, or bleed vaginally, at the end of the cycle. This phenomenon must have some significance; just what is unknown.

However, in studying abnormal cases, we often obtain valuable information from a careful history of the regularity, duration, and quantity of bleeding. This information may at times be misleading. No doubt there are women who, at times, menstruate normally but do not ovulate, and again women who ovulate but do not menstruate. We have all seen instances of the latter, women who were amenorrheic but became pregnant.

A diagnostic aid which we probably should use more often is the study of the endometrium obtained by curettage or aspiration. The method of aspiration suggested by Burch is simple and can be done in the office without an anesthetic.

It would be a great aid in diagnosing and treating our abnormal cases if it were possible to learn, by some simple procedure, the concentration of the hormones in the blood stream or the quantity excreted in the urine. Various men are working on this problem by making bio-assays, but as yet quantitative bio-assays of these hormones are crude and cumbersome. Imagine how difficult it would be to attempt to diagnose and treat diabetes mellitus by only a history and physical examination.

With our present knowledge of physiology, we have a better understanding of many pathological conditions which previously were obscure. I shall mention only a few: (1) the amenorrhea of acromegaly, Froehlich's disease, and hypothyroidism; (2) the profound cachexia of Simmonds' disease; (3) the atrophy of the uterus and ovaries and the prolonged lactation of Frommel's disease; (4) the large luteal tumors present in the ovaries of women with chorio-epithelioma; (5) the taking on of the secondary sex characteristics of the male which occurs in young girls and older women with certain tumors of the adrenal and ovary.

Those of us who are engaged in the practice of medicine are more interested in therapy. We would prefer that a paper on this subject give us a minimum of physiology and pathology with a maximum of therapy. Unfortunately, this is hard to do because therapy has not kept pace with the new discoveries in physiology. This discrepancy is to be expected when we realize that there is a big gap between the experimental laboratory and the clinic. A discovery may be made in the laboratory which lays down certain fundamental principles. However, it may take years of hard work on the part of men familiar with both research and clinical medicine before these principles can be made applicable or may be utilized by us in our daily practice. For example, it was formerly believed that heat or estrus in the lower animals was identical to menstruation in the human. With the discovery of the estrogenic hormone, it was believed that by its use we could induce menstruation in women with amenorrhea. We now know that estrus and menstruation are not identical, the former occurring during the middle of the cycle and the latter

(Concluded on page 272)

ANALGESIA IN LABOR

(MODIFIED GWATHMEY METHOD)

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In 1591, about one hundred years after Columbus discovered America, a certain lady of rank was burned alive at Edinburgh, Scotland, because she had sought relief from pain at the birth of her two sons. Within the last decade and a half, some five or six methods of obstetrical analgesia applicable throughout labor have been developed and perfected to the degree that today it is only slightly important which method one chooses to use in a given case. The important fact is that we finally have obstetrical analgesia.

The two eminent manifestations of this achievement are the prevailing tranquillity in modern labor chambers, and the increasing willingness of womenfolk to undergo child-bearing. Indeed, analgesia has become such an integral phase of modern conduct of labor that not only does the present-day mother anticipate it as a customary service, but the up-and-coming obstetrical attendant finds himself familiar with one or more methods, and diligently applies one or the other rather routinely. Likewise, every modern hospital obstetrical department adopts some form of obstetrical relief more or less as a regular procedure. As a rule, the method employed is one approved by the staff, the prerequisite being satisfactory analgesia without injury or deleterious effects upon either the mother or the infant.

It is the purpose of this paper to describe and outline the form of relief developed in major part and used quite routinely in the obstetrical department of the Indiana University School of Medicine. The method referred to is a grossly modified Gwathmey technic.

GWATHMEY TECHNIC

It can be stated that the pioneer method of Gwathmey, ordinarily spoken of as "rectal ether," still enjoys a commendable popularity. This popularity is rightfully merited because of certain fundamental advantages the method offers, namely:

1. Ease of administration.
2. High degree of efficiency.
3. Extreme safety for both mother and infant.
4. Equal adaptability to home and hospital use.
5. Unique freedom from contraindications.

A few comments upon each of these advantages are appropriate.

1. Ease of Administration. No complicated or expensive apparatus is required. If need be, the equipment used in giving an ordinary enema will suffice.

The individual administering the rectal ether need not be especially skilled. At the University Clinic, fully 95% of the instillations are performed by a student nurse. The question is sometimes raised as to whether it is safe for rectal ether to be given by one not particularly expert. In answer, it is to be borne in mind that the amount of ether used (two and one-half ounces) is insufficient for anesthesia effect, producing instead only analgesia, even though the patient weighs as little as one hundred pounds. The effect is not so profound as to entail danger of the jaw dropping, or the tongue being swallowed. Indeed, the responsibility or risk is no greater than when one orders a nurse to give ¼ or ½ grain of morphine hypodermically.

2. Efficiency. Davis[1] in his report covering fifteen hundred cases (twelve hundred indoor and three hundred outdoor) at the New York Lying-in Hospital reported a satisfactory analgesia in 85% of the cases. Subsequent reports from the same institution, covering many thousands of cases, emphasized an equal efficiency. By improved medication and certain modifications of technique, this efficiency rate has been raised at the Clinic to approximately 95%.

3. Safety. This can be stated adequately by referring to the series of twenty thousand hospital and home cases reported by Gwathmey[2] in which no maternal or infant loss was attributable to the use of rectal ether anesthesia. This favorable finding has been substantiated by another series in excess of five thousand cases conducted at the Indiana University Clinic. Also, a careful survey has failed to show an associated temperature morbidity.

No infant or maternal loss attributable to the employment of rectal ether analgesia has ever come to the author's attention.

4. Adaptability to Both Home and Hospital Use. No method of analgesia can be acclaimed as popular unless it applies readily first to that larger group of laboring women, those who still are confined in the home, constituting fully 65% of American births. Any method whose usefulness is limited largely to the minority group, those delivered in the hospital, is in the general sense inadequate.

Being convinced quite early as to the suitability of Gwathmey's method to home use explains much of the author's continued interest in modifying the original technique to a form now very applicable in that larger field, home obstetrics. This accounts directly for much of the simplicity of the method as now employed at the University Clinic.

5. Freedom from Contraindications. There are no contraindications to rectal ether analgesia other than those that contraindicate a soap-suds enema. It is to be added that ordinary hemorrhoids, rectal fistulas and fissures do not afford exclusion. Davis[3] found no contraindication in more than 12,000 cases.

In the Clinic rectal ether analgesia is used with impunity among nephritic, cardiac and pulmonary cases, whether the affection be acute or chronic. Likewise it is used in diabetic and toxemic cases.

[1] Davis, A. B.: *Surg. Gyn. Obst.*, June, 1925, Vol. 40, p. 868.
[2] Gwathmey, J. T.: *Surg. Gynec. Obst.*, Aug., 1930, Vol. 51, p. 190.
[3] Davis, A. B.: Personal communication, March 10, 1930.

It should be added that as a basal anesthetic for a cesarean or any laporatomy, the rectal instillation of the ether-oil mixture, augmented usually by 3 or 4½ grs. of oral pentobarbital, affords two important advantages: (1) the patient is asleep on going to surgery; (2) the usual required amount of inhalation anesthetic, whether it be gas or ether, is minimized fifty per cent.[4] Bronchial irritation and postoperative nausea are proportionately reduced. Rectal ether may be employed with special advantage as a preliminary to local anesthesia. However, *its use is unsafe in conjunction with chloroform.*

MODIFIED GWATHMEY TECHNIC

The modifications of the Gwathmey technique developed in the Obstetrical Department of Indiana University are as follows:

1. The substitution of pentobarbital sodium by oral administration for the magnesium sulphate administered intramuscularly. An intramuscular injection is primarily a surgical procedure, and is of sufficient moment to hinder the method's use not only in the home, but in hospital practice as well. The practical value of the purported synergystic action of magnesium sulphate and morphine is more than replaced by the increased amnesia and hypnosis afforded by the pentobarbital sodium. In this instance this drug is found to be superior to sodium amytal. It incurs but one-third the amount of associated delirium, requires half the dosage, and lends a prompter effect and a less protracted hypnosis.

At present the merits of a more recent barbiturate, seconal, are being investigated in the Clinic. This drug, although having the same dosage, is purported to have a more rapid, deeper and less protracted effect than pentobarital sodium. However, the study has not progressed sufficiently to warrant a report.

2. The substitution of the degree of the patient's suffering for the degree of cervical dilatation as a criterion for the time of administration of the sedatives and the ether instillations. This modification spares the patient the contaminating risk from a series of vaginal or rectal examinations. In general practice this risk becomes quite real in that as a rule the vaginal type, not infrequently of questionable technique, is employed.

Further, in addition to sparing the patient the annoyance of the examinations, there is considerable economy on gloves. Then, too, by using the patient's discomfort as a guide she is extended more satisfactory analgesia. Analgesia refers primarily to the relief of pain and not to cervical dilatation. Many elderly primiparae (these days their number is on the increase) experience several hours of uncomfortable labor before the cervix attains two fingers dilatation, while on the other hand many multiparae have two fingers dilatation before labor begins.

3. A third major modification has been the perfection of a pressure instillation instead of the gravity or funnel method. The gravity or funnel method has two or three distinct disadvantages. The first of these is the time element. During the required three to eight to ten to twelve minutes, the expulsive pains may greatly interfere with the patient's ability to retain the mixture. Also, an assistant is usually employed to an advantage; sometimes of necessity. Not infrequently undesirable mussiness occurs.

The pressure instillation is accomplished by a special apparatus.[5] The advantages in employing this pressure apparatus are distinct, and are as follows: (1) The actual instillation is performed within fifteen seconds—readily within any pain interval. (2) The instillation is performed without an assistant. (3) The instillation is higher, and the mixture is better and more comfortably retained. (4) There is but little or no mussiness.

In home practice a fair substitute for the instillation apparatus is a two-ounce Asepto bulb syringe with a 22 Fr. soft rubber catheter attached—or, better still, a hard-tipped four-ounce Davol rectal syringe and catheter.

4. The substitution of a five to ten per cent sodium bicarbonate enema for the soap-suds enema at the beginning of labor. The soap-suds enema by virtue of its strong irritating effect upon the rectal mucosa is materially responsible for the occasional rectal irritation following the use of rectal ether. A proctoscopic examination after a soap-suds enema reveals an effect quite akin to acute proctitis. The irritating ability of soap-suds is best demonstrated by dropping a small drop into one's eye.

The soda enema is conveniently prepared by adding a heaping tablespoonful of sodium bicarbonate to a quart of tepid water. Not only is the enema efficacious and comfortably active, but its employment in conjunction with rectal ether perceptibly minimizes post-delivery rectal irritation.

5. The omission of the follow-up ounce of oil. Experience has demonstrated no necessity for the additional ounce of oil.[6] By reducing the gross mixture from six to five ounces, retention is facilitated.

6. Omission of the warming of the ether-oil mixture. The ether is sufficiently rapidly absorbed from a mixture at room temperature. Warming incurs loss of ether by evaporation.

7. Dispensing with darkening and quieting the labor room. At the Clinic labors are conducted in a free, easy atmosphere. Shades are not drawn, patient's ears are not plugged, ordinary conversation is not hushed, and doors are not closed. It is not an infrequent occurrence to have three or four analgesized laboring patients in neighboring beds, none being aware that the others are in labor.

8. The omission of the quinine. This is an

[4] McCormick, C. O.: *Jrnl. Ind. St. Med. Assoc.*, Oct., 1932, Vol. XXV, No. 10, p. 455.

[5] McCormick, C. O.: *Am. J. Obs., Gyn.*, Sept., 1930, p. 411.

[6] Smith, D. L.: *J. A. M. A.*, March 31, 1928, Vol. 90, p. 1031.

important departure from the original technique. By carrying the cases into active labor under pentobarbital sodium, quinine is omitted without disadvantage. By omitting the quinine not only is the dissolving agent, alcohol, omitted, but the risk of the occasional quinine reaction[7] is also eliminated. However, the chief advantage of its omission comes through greatly simplifying the making of the ether-oil mixture. The process resolves itself simply into adding one and one-half ounces of mineral or olive oil to two and one-half ounces of ether. This simplification greatly assists the general practitioner in doing home deliveries.

9. The addition of two drachms of paraldehyde to the ether-oil mixture. Paraldehyde, although a strong hypnotic, is one of the safest. As much as two ounces has been given (by mistake) with no untoward result except prolonged sleep.[8] At the Clinic, a routine amount of two drachms is employed. Paraldehyde is a very helpful adjunct in that it greatly deepens the amnesia and smooths the analgesia. It is particularly applicable during the second stage.

OUTLINE OF ENTIRE PROCEDURE

Herewith is presented in outline the analgesic procedure usually pursued in the Obstetrical Department at Indiana University School of Medicine, depicting the various modifications of the original Gwathmey method developed in that department:

1. A cleansing 5% to 10% soda enema (one grossly heaping tablespoonful of sodium bicarbonate in one quart of tepid water) is given at the beginning of labor, preferably not less than one hour before rectal ether instillation.

2. Early in labor the patient is addressed as follows: "Mrs. ————, we are desirous of making your labor as painless as possible, and are prepared to do so without danger to you or your baby. Our success in relieving you will depend somewhat upon your cooperation. Therefore, when your pains become uncomfortable let the nurse know and she will give you two, or perhaps three, capsules (pentobarbital sodium, each grs. 1½) to relieve you.

"When your pains again become uncomfortable notify her as before and she will give you another capsule or two (pentobarbital sodium), or maybe a hypodermic (morphine sulphate, grs. 1/6 or 1/4).

"Later, when this medicine begins to lose its effect, let her know and she will inject a solution into your rectum (ether-oil or ether-paraldehyde-oil)."

Morphine is not administered within four hours of the anticipated time of delivery. Most primiparae do not require its use, and it is very rarely given in multiparous cases.

3. *Formula No. I:*

Ether	ounces IISS
Olive or mineral oil	ounces ISS

Formula No. II:

Ether	ounces IISS
Paraldehyde	drachms II
Olive or mineral oil	ounces ISS

(Note the omission of quinine.)

4. Rectal Ether Instillation—performed by using the special pressure apparatus.

Important Points in Technique. (a) Patient is placed upon her left side with the thighs well flexed, and hips brought to edge of bed. (b) A rubber glove is placed upon the right hand, and the anal area and the catheter are freely lubricated with the lubricating jelly (seaweed or tragacanth —not petrolatum). (c) *The catheter is guided past the presenting part with the gloved index finger, making certain that the catheter does not curl. The glove is then removed.* (d) *The instillation is started immediately at the conclusion of an uterine contraction.*

5. Rectal ether instillations are repeated as needed, in an hour if really indicated. Analgesia is maximum in about forty minutes, and its usual duration is from two to six hours.

The average multipara requires one or two instillations; the primipara requires two or three. (In one instance, seven instillations were administered during a 48-hour labor without ill effect.)

6. If the case is in extreme active labor when first seen, the pentobarbital sodium and the rectal ether are often administered simultaneously.

7. In order to maintain a desired amnesia 1½ to 3 grs. of pentobarbital sodium is sometimes given before and after the morphine (if used), and between the ether instillations as indicated—total amount rarely exceeding 7½ to 9 grs. per case.

8. The labor room is not darkened, and is not quieted by plugging the patient's ears, hushing conversation, closing the door, etc.

9. As a rule the analgesia is augmented during the perineal stage (especially in primiparae) or instrumentation period by inhalation ether, nitrous oxide, or ethylene gas anesthesia. Only about one-half of the usual amount of inhalation anesthetic is required. Because of the narrow margin of safety, chloroform is not used.

10. As in dealing with any prolonged form of analgesia, three precautions are kept in mind: (a) The patient is guarded from falling out of bed. (b) In protracted cases, dehydration and exhaustion are prevented by free oral and intravenous administration of fluids and glucose. (c) Bladder is observed regularly for over-distention and is emptied by catheter when necessary.

The primely important advantages of simplicity, safety, efficiency, inexpensiveness, equal adaptability to home and hospital use, and unusual freedom from contraindications, qualify rectal ether analgesia as being more nearly applicable to every woman in labor than any of the other present-day forms of relief.

[7] Gustafson, G. W.: *Am. J. Obst. and Gynec.*, Dec., 1929, Vol. XVIII, No. 6, p. 877.

[8] Gwathmey, J. T., and McCormick, C. O.: *J. A. M. A.*, Dec. 21, 1936, Vol. 105, No. XXV, p. 2045.

SPINAL ANESTHESIA*

CORRELATION OF THEORY AND PRACTICE

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Elkhart

Spinal anesthesia, like many other surgical procedures, has enjoyed periods of widespread popularity and periods of relative neglect. Its last period of popularity saw many methods advocated, some depending upon a knowledge of fundamental physical and physiological laws, others depending upon manufactured gadgets and special solutions as their symbols of safety or controllability.

For a time, enthusiasm ran high. All writers on the subject used superlatives to describe their results. Many men without a fundamental knowledge of anesthesia were led to try the new methods, "as simple as giving an ordinary hypodermic." Some came to grief through ignorance of avoidable complications.

Articles entitled "Complications" and "Fatalities" next made their appearance, tempering enthusiasm and discouraging the inexperienced.

Since the close of the enthusiastic era, spinal anesthesia has been used with far greater general safety and satisfaction. Dangers have been recognized, complications prevented, methods analyzed, and technic simplified.

The current literature has described many methods of inducing spinal anesthesia. Each emphasizes a different factor or formula, and each dwells at length on the dangers of other methods. The contemplation of a dozen different religious creeds could be no more confusing than a study of the theories and arguments of recognized authorities on spinal anesthesia. This confusion can be avoided by consideration of the fundamental physical and physiological principles upon which all technics are based

PHYSICAL FACTORS

Experimental glass tube injections cannot exactly simulate intraspinal conditions, but they do illustrate the effect of certain physical factors closely enough to provide food for thought. When procain hydrochloride is injected intraspinally, a block anesthesia is produced of all spinal nerve roots bathed by the solution. The usual intraspinal dose of procain is clinically absorbed within ten minutes, so the ten minute travel of experimental glass tube injections may be fairly assumed to indicate relative height of anesthesia.

The cardinal physical factors governing mass movement of procain solutions in the spinal canal are:

I—*Specific Gravity*—The rate of mass movement of an injected heavy solution (simple solution of procain in spinal fluid) varies directly with its effective specific gravity (difference between specific gravity of spinal fluid and the injected solution).

II—*Force of Injection*—A forcible injection will "coast" a heavy solution up the spinal canal faster and farther than a slow injection. Speed of injection and size of needle (nozzle effect) control force.

III—*Position of Patient*—A heavy solution will gravitate to the lowest point in the spinal canal. Fowler's position will produce a "low" and Trendelenburg a "high" anesthesia. With light solution (dilute procain in distilled water, or alcoholic procain solutions), gravitational effects are reversed.

IV—*Volume*—The effective height of anesthesia is directly proportional to the volume of solution injected.

Other physical factors, such as minor variations of spinal fluid pressure, agitation of pulsating arteries and rhythmic respiratory pressure changes, are of no practical significance as variables.

An exaggerated lumbo-dorsal curve would theoretically favor gravitation of a heavy solution to the sacral and thoracic portions of the canal. In actual practice, however, muscular relaxation allows the normal lumbar curve to flatten down and minimize gravitation before complete absorption of the procain.

The site of injection is usually lumbar, to avoid the possible dangers of cord injury. Variation of injection site from L^2 to L^4 produces no appreciable difference in height of anesthesia.

METHODS

If a relatively small volume of a concentrated procain solution is forcibly injected through a small needle, its inertia (weight[1] x force) will carry it far up the lower side of the canal. Dilution by large amounts of spinal fluid decreases its inertia, until by volume displacement the solution is forced up the canal as an advancing column occupying its entire cross section. The effect of gravity on such a dilute solution is practically nil. Therefore, the solution can be injected with the patient sitting, and Trendelenburg position can be assumed immediately without fear of much further cephalad extension. Similar heights of anesthesia may thus be obtained by several different combinations of physical factors, as exemplified by the various popular technics of induction.

Barbotage as employed by many authors actually amounts to nothing more than an unmeasured and uneven dilution, with the speed of injection uncontrolled. Cephalad travel of the anesthetic agent is, therefore, effected by volume displacement, and is inaccurate because unmeasured.

The routine use of light (spinocain) solutions offers no advantage over a simple procain-spinal fluid solution as its lightness (difference between specific gravity of spinal fluid and the injected solution) after thorough mixing by barbotage is so greatly reduced as to be ineffective. Height of anesthesia is obtained by volume displacement, and

* Presented before the Section on Anesthesia of the Indiana State Medical Association at the South Bend session, October 7, 1937.

[1] Weight—effective weight or difference between specific gravity of spinal fluid and the injected solution.

the degree of control afforded by tilting the table is negligible.

Viscosity is a property of undiluted spinocain, but after dilution by barbotage its effect is also nil. If its starch paste actually prevented diffusion and caused it to "float in the spinal fluid as the air-bubble in a spirit level," the area of anesthesia would be limited to a very few nerve segments. The strychnine component can have no demonstrable vasomotor effect in the presence of the procain block, and any cerebral effect, via systemic absorption, would only be partially to offset the pre-operative hypnotic.

There are many other unnecessarily complicated methods, such as the withdrawal of large amounts of spinal fluid to hasten diffusion, followed by its intramuscular injection "to prevent vascular imbalance." Injection of the anesthetic agent dissolved in the patients own blood serum was also offered at one time as a method of great safety for beginners.

In spite of the many complications of these methods, excellent anesthesias have been obtained by their use. The safety factor, however, is not to be found in any special solution, instrument, or "rule of thumb" method, but comes from the anesthetists fundamental knowledge of anesthesia.

In 1929, I published a technic based on the previously outlined cardinal physical factors. The volume of the injected solution can be varied more accurately than the force of injection, tilt of table, etc., hence was adopted as the variable, and all other factors held as constants. By injection of various volumes of a constant percentage procain solution, using a uniform speed of injection, uniform size needles, and a uniform horizontal position, I am able to produce anesthesia of any practical height on the body. This method does not depend upon special solutions, instruments or charms. It is no safer than the anesthetist who uses it, but in competent hands it presents no unnecessary complications or hazards. (See Fig. 1).

In certain situations, such as kidney or ureteral operations with the patient lying on his side or perineal work when Trendelenburg position is desirable, a "light" solution may be extemporaneously prepared by the addition of enough (5%-10% by volume) 95% ethyl alcohol to decrease the resultant specific gravity. (See Fig. 2.)

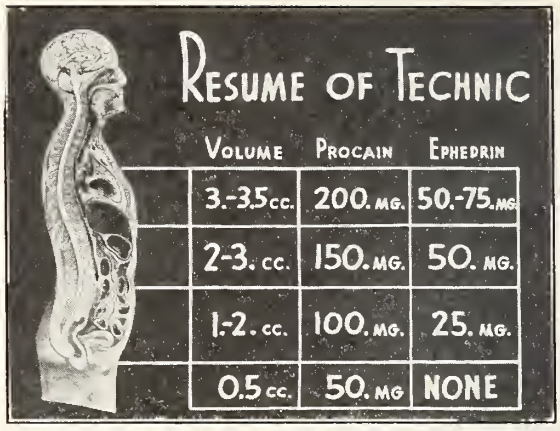


Fig. 1. The above basic technic will produce 75-90 minute surgical anesthesia to indicated heights in the average 5'5" 150-lb. adult.

Volume and dosage should be decreased in proportion to spine length for children, and increased but slightly for large adults, as procaine dosage should be proportional to the amount of nerve tissue to be saturated, NOT *to body weight.*

PHYSIOLOGY

Procain, a crystalloid, behaves as any salt in the presence of colloids and semi-permeable membranes. It diffuses into the spinal nerve roots, blocking sensation as it goes, until it reaches osmotic equilibrium. Nerve tissue does not metabolize or detoxify the drug locally. It is slowly taken up by the capillary circulation, detoxified by the liver, and excreted by the kidneys.

The frequently repeated fallacy that vasodilation and pooling of blood in the splanchnic vessels is solely responsible for the blood pressure fall has been disproved. Five distinct mechanisms of vascular control are simultaneously rendered partially or completely inactive by procain spinal block. In their order of appearance and importance they are:

I—Skeletal muscular relaxation, which allows passive dilation of capillary and venous channels.

II—Passive dilation of arteries and arterioles in the absence of sympathetic vasoconstrictor stimuli.

III—Decrease or complete cessation of normal adrenal secretion by paralysis of the sympathetic secretory nerves to the adrenal glands.

IV—Slowing of heart action by paralysis of the sympathetic cardiac accelerator nerves which allows a preponderant vagus effect.

V—Intercostal paralysis which diminishes the pumping effect of normal respiration on the great vessels.

Vasodilation is limited to the anesthetized area as shown by skin temperature changes. If anesthesia of the perineum, one or both legs only is produced, vasomotor paralysis is relatively slight, and it is quickly compensated by vasoconstriction in unanesthetized portions of the vascular system. As height of anesthesia on the body is increased, the compensatory vasomotor area is reduced, resulting in a blood pressure fall proportional to the height of anesthesia.

BLOOD PRESSURE CONTROL

As the vasomotor paralysis of spinal anesthesia is due to a central block, peripheral vasomotor stimulants such as adrenalin or ephedrine are effective. As ephedrine stimulation is the longer lasting, it is most commonly used. When given prophylactically in amounts proportional to the height of anesthesia to be produced, it effectively minimizes blood pressure variation.

The effect of ephedrine, while not ideal, closely

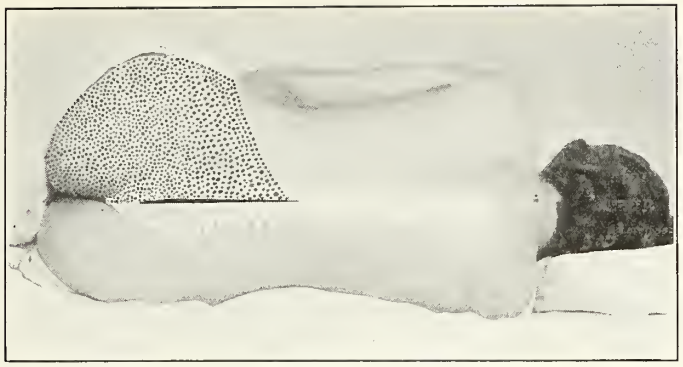


Fig. 2. UNILATERAL LEG ANESTHESIA

One hundred mg. Procaine in 1 cc. spinal fluid with 0.1 cc. ethyl alcohol is injected in 5 degrees Trendelenburg position. The "light" solution rises, bathing the upper nerve roots only. If this position is maintained (5-10 min.) till procaine absorption is complete, unilateral anesthesia results.

If patient is immediately shifted to a prone or supine position, redistribution of the injected solution produces a saddle anesthesia comparable to sacral block.

For kidney operations, larger volumes of a "light" solution are injected, the kidney rest is immediately raised and the table is tilted so that the thoracic spine is horizontal. The "light" solution rises to the apex of the spinal curve, thus fixing most of the procaine in the nerve roots supplying the operative site.

simulates normal sympathetic vascular control. It constricts arteries and arterioles, and stimulates the adrenal secretory nerves, resulting in further vasoconstriction by adrenalin. It stimulates the cardiac accelerator nerves, thus maintaining a more nearly normal minute-volume cardiac output. It is said to have a direct stimulant effect on the respiratory center, and its well-known bronchodilator action offsets the bronchoconstrictor effect of high procain block, rendering respiration less difficult.

All these effects are produced in proportion to dosage. If dosage is proportional to height of anesthesia, vascular tone during anesthesia may be made to closely approximate normal levels throughout.

The use of ephedrine has been severely criticized by many writers, some of whom admit that they have never used it. Others condemn its use because its injection hypodermically after vascular collapse will not magically restore their patient's circulation, though it is well known that an intramuscular injection of any drug will not be absorbed unless circulation is adequate. Still others condemn it, citing animal experiments in which huge doses were found to have a toxic effect on the heart. By like reasoning, digitalis, morphine, ether or any drug would be condemned because over-dosage is harmful.

Babcock, Labat, Koster and others omit ephedrine, and depend upon immediate Trendelenburg position to gravitate sufficient blood to the brain to prevent cerebral anemia. This can be done, if the comfort of the patient who is more frequently faint and nauseated, is not considered. Relatively small doses and great dilution of the procain must be used, or the effect of gravity will carry it high enough to paralyze respiration.

Labat and Koster have persistently claimed that blood pressure falls to unmeasurably low levels are harmless. It is now generally agreed that respiratory paralysis is not produced by direct action on the respiratory center when small procain doses in great dilution are used. It is also known that bulbar anemia will cause respiratory paralysis, but it does not follow that Trendelenburg position alone will always prevent bulbar anemia. Moderate to severe tissue oxygen desaturation has been shown to exist in this situation by venous oxygen determinations. Though the margin of safety may be wide, any cardiac impairment or pulmonary embarrassment will further diminish circulatory efficiency and respiratory paralysis may occur.

Is it not better to prevent the blood pressure fall than to trust entirely to a theoretical margin of safety which is narrowed by any cardiac impairment or pulmonary embarrassment?

In practical use, no evidence of any harm has ever been observed when ephedrine was given prophylactically in proper dosage, and with a bit of common sense.

TECHNICAL DIFFICULTIES

Failure to produce anesthesia is often experienced by the beginner or the careless operator. "Dry tap" is an alibi for failure to puncture the dura. "Idiosyncrasy to procain" is another alibi offered to excuse extradural injection after successful puncture. The use of a small, short-bevel needle, careful steadying of the hub while attaching or detaching the syringe, and free aspiration before and after the injection, will assure intradural injection.

Anesthesia too short may be due to a partially extradural injection, insufficient procain dosage, slow or unavoidably prolonged surgery. If additional anesthesia is needed for closure of an abdominal wound, wide infiltration or abdominal field block with ½% procain can be done in far less time than required for induction of inhalation anesthesia. If anesthesia wears off before the intra-abdominal work is completed, the anterior splanchnic injection of Braun will give an additional two hours of excellent visceral anesthesia, closure to be made under field block.

COMPLICATIONS

Psychic unrest should be prevented by adequate preoperative hypnosis, varied according to the individual patient's nervous temperament. If needed, additional sedatives may be given during operation. Avoidance of unnecessary noise by the operating team, and the personal attention of a trained anesthetist or nurse at the patient's head is helpful.

Nausea during operation is frequently due to vigorous mesenteric traction and may be obviated by gentle handling. As nausea is frequently the first sign of anoxemia, forced deep breathing, or inhalation of 10% CO_2 in oxygen is indicated.

Vascular collapse and respiratory failure are always preceded by a long train of danger signals: progressively falling blood pressure; high anesthesia, marked intercostal paralysis, anoxemia, nausea, cyanosis and stupor, which should be sufficient warning to the anesthetist to start treatment. CO_2 inhalations are first used, then artificial respiration and adrenalin in an intravenous saline infusion. Probable causes are insufficient preanesthetic ephedrine, insufficient time allowed for absorption before the procain injection, height of anesthesia out of control, or hemorrhage during operation.

Post-anesthetic complications, such as meningitis, meningismus and oculomotor paralysis are due to bacterial or chemical contamination of injected solutions. The use of procain crystals dissolved in spinal fluid, scrupulous cleanliness and care in sterilizing needles and syringes will obviate this trouble. Headaches are frequently the only sign of a chemical irritation or meningismus. They are only rarely due to post-puncture leakage. Analgesics and bed rest usually relieve. If persistent, a second spinal puncture will usually show an increase in pressure and cell count, and relief is obtained by mere drainage. The post-puncture leakage type of headache will be relieved by bed rest in the horizontal or Trendelenburg position.

Post-operative pulmonary complications are less frequent than after inhalation anesthesia, providing inhalation of CO_2 in oxygen is used during or after all high anesthesias. The decreased respiratory activity of high anesthesia may allow the collection of bronchial mucus, producing atelectasis if not "blown off" by CO_2 stimulation.

FATALITIES

The occasional catastrophic death with convulsions and simultaneous respiratory and cardiac arrest, occurring immediately after the spinal injection, is usually due to the cerebral toxic effect of a large dose of procain injected into the venous plexus about the cord.

Death occurring within a few minutes after the injection of a large intraspinal dose of procain with immediate use of Trendelenburg position is due to the gravitation of concentrated procain to the base of the brain which will produce respiratory and vasomotor collapse by direct action.

Death may occur from cerebral anemia and its sequellae, regardless of the injection technic used, if circulatory stability is not properly safeguarded.

The complications and fatalities of spinal anesthesia are preventable, and when they do occur they are the direct result of technical error or poor surgical judgment.

CONTRAINDICATIONS

Contraindications are few when surgery below the diaphragm is contemplated and a well-trained anesthetist is available.

Any disease of the central nervous system, as syphilis, pernicous anemia, epilepsy, tumor, hemorrhage or infection should be considered contraindications, as subsequent neurological symptoms due to progress of the disease might be blamed upon the method of anesthesia.

Chest conditions seriously limiting respiration, and the more marked cardiopathies are contraindications to any but emergency surgery, which may be more safely performed under local or regional anethesia.

Shock from hemorrhage should contraindicate surgery under any form of anesthesia until relieved by transfusion or intravenous fluid. Traumatic shock is frequently benefitted by spinal block of the reflex arc.

Ruptured appendix or perforated ulcer are listed as contraindications by many authors on the theoretical basis of increased peristaltic activity. At operation, it is never more vigorous than when seen fluoroscopically after barium meal, so I believe mechanical dissemination of infectious material to be less under spinal than that caused by the forcible respiration of an ether induction.

INDICATIONS

If the patient's physical condition will permit surgery under inhalation anesthesia, operation can be performed under spinal with greater convenience to the surgeon because of the more complete muscular relaxation, and with less danger to the patient because of decreased operative trauma from forcible manipulation and retraction.

SUMMARY

The many superficially dissimilar technics for induction of spinal anesthesia are based upon different combinations of the same physical factors.

Ephedrine, when used prophylactically in dosage proportional to height of anesthesia, safely and effectively minimizes blood pressure variation.

Any technic which maintains blood pressure at a safe (above 80 mm systolic) level throughout the period of anesthesia, will prevent cerebral anemia, vascular and respiratory collapse.

Spinal anesthesia should not be performed, as is frequently done, by men whose sole preliminary training has been limited to the technic of lumbar puncture.

Safety is not to be found in any special solution, instrument or "rule of thumb" method, but comes from the anesthetist's fundamental knowledge of anesthesia.

Complications and fatalities are preventable. When they occur, they are the direct result of technical error or poor surgical judgment.

415 SOUTH SECOND ST.

DISCUSSION

F. T. Romberger, M.D. (Lafayette): I have known Dr. Stout for a period of eight years, having visited with him when he was connected with the Jackson Clinic, Madison, Wisconsin, in 1928, at which time his publications were attracting wide attention. What I saw there convinced me of the basic soundness of his technic in spinal anesthesia. His paper covers the entire field in a condensed (almost too condensed) form, and in a concise manner. For teaching purposes I wish he had elaborated more in detail on the principles governing the height and duration of the anesthesia, this for emphasis. These principles were published some years ago by Evans in his book on "Principles of Spinal Anesthesia," but he merely mentions them without discussion. This was most unfortunate at the time, because it left clinicians in spinal anesthesia, all over the country, fumbling along, trying to improve their technics by the processes of trial and error, until many, many variations were developed, each of course sound and safe in the hands of the user, because finally each had of necessity to be based on the elemental principles here discussed by Dr. Stout.

I am a firm believer in proper premedication, in prophylactic ephedrine, in oxygen inhalations to combat anoxemia and to sustain intrathoracic pressure, and finally, in keeping accurate records of each individual administration.

L. F. Sise, M.D. (Boston): In speaking of ephedrin, I think there is in this drug one further advantage which has not been mentioned. I believe I am correct in stating that it dilates the coronary arteries. If used incorrectly, especially in too large doses, it produces very bad effects. I know of three cases where death resulted. In one case in which it was given by an intern, a prophylactic dose of 50 mg. was given and spinal anesthesia was induced, and when the blood pressure fell, 50 mg. more and again 50 mg. more were given, so that a total dose of 150 mg. was administered. The blood pressure then rose and came up to normal, and above, but the patient became cyanotic, auricular fibrillation started, and the patient died. We know that if it is used incorrectly it has a bad effect.

Dr. Stout spoke of testing the needle before use. We used to employ rustless steel needles. These corroded on the inside, but looked quite all right on the outside unless examined very closely. If this was done, a minute spot could be found, and if the needle was tested by bending, it would snap at this point. In this way we broke fourteen needles, which made me quite nervous, and I was made more nervous still when one broke in the spinal canal. We had to do an operation to get the needle out. We finally decided to use needles made of gold. That was about eight years ago, and no needle has broken since then. Some of them have split a little so that we have had to discard a few, but on the whole they have appeared to wear almost indefinitely.

ABSTRACT

CLINICAL EXPERIENCE IN USE OF SUCROSE INSTEAD OF DEXTROSE IN OSMOTIC THERAPY OF INCREASED INTRACRANIAL PRESSURE OCCURRING IN CASES OF ACUTE BRAIN INJURY

From their experience in the use of dextrose E. Vernon Hahn, Frank B. Ramsey and Kenneth G. Kohlstaedt, Indianapolis (*Journal A.M.A.*, March 6, 1937), came to recognize that dehydration therapy can be carried too far. The patient's water metabolism needs to be maintained at a level adequate for the elimination of nitrogenous wastes and in protracted cases blood chemical determinations should be used as a guide. Injections of concentrated dextrose can be badly timed. Lumbar puncture, performed periodically and by a meticulous technic, is of value as a means of keeping informed of intracranial conditions, of gaining exact indications for administering osmotic treatment and of assisting in the maintenance of intracranial pressures consistent with life. The authors' combined clinical experience with the administration of 50 per cent sucrose instead of dextrose intravenously in cases of brain injury comprises twenty-five cases in which one or more doses of the agent were given. For a demonstration of the results which they believe can usually be expected, under certain pathologic conditions, from the intravenous injection of 50 per cent sucrose, they report three cases with interpretative comment, in which the efficacy of hypertonic sucrose solution administered intravenously in reducing traumatically increased intracranial pressure was demonstrated by means of the well established correlation between intracranial hypertension and compensatory arterial hypertension. Compensatorily elevated systolic pressures were repeatedly lowered with concomitant improvement in the functions of the medullary centers, following administration of the agent. It is the authors' belief that the vasomotor, cardiomotor and respiratory functions of the brain stem constitute indicators of intracranial tension, at certain critical levels of intracranial hypertension, which probably surpass cerebrospinal fluid manometry in delicacy. Clinical signs such as depth of coma and motor activity are also indicators, and in these cases they were in agreement with the blood pressure changes reflecting improved brain function after the administration of sucrose. These are the results which would be expected from consideration of the experimental work with sucrose reported by others. The dose of sucrose most frequently employed was 100 cc. of 50 per cent solution, corresponding to from 0.25 to 1 Gm. of sugar per kilogram of body weight. Occasionally as much as 2 Gm. per kilogram was given. In no instance were any untoward effects observed that could be attributed to sucrose, although disadvantageous and even dangerous tissue dehydration might have occurred had the patients' water metabolism not been given careful attention. Profuse diuresis always occurred after the administration of sucrose, and the specific gravity of the urine was always high, owing to the direct excretion of the sugar. For this reason concentration-volume data, which would ordinarily indicate satisfactory renal elimination of nitrogenous products, could not be relied on and recourse was made to determination of blood nitrogen in several instances. Osmotic therapy seems to be a valuable adjunct in the management of some cases of brain injury and sucrose appears as effective as dextrose in producing therapeutic changes when intracranial pressure is elevated to a critical level. If further experience confirms this impression, sucrose should be adopted as the agent of choice for influencing the brain osmotically because of its freedom from the objectionable (but not prohibitive) feature of producing a secondary rise of intracranial pressure, experimentally proved with respect to dextrose.

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MAY, 1937

EDITORIALS

AMERICAN HOSPITALS

With the advent of spring, we look forward to a special issue of the *Journal of the American Medical Association* known as the hospital number. This year the issue appeared March 27 and, like its predecessors over a long period of years, it contains a veritable mine of information. As an editorial in the same issue points out, it is very evident that there is an ever-increasing number of patients being treated in our hospitals, and this means that it is the duty of some organization to see to it that our hospitals are adequate in number and that they are properly equipped and managed.

Hours spent in going over the various tables and in carefully reading the text will be well repaid. Naturally, we are interested in a comparison of Indiana hospitals with those in other comparable sections, and such a comparison leads to the conclusion that Indiana is rather well cared for in the matter of hospitals.

The report was prepared on the basis of returns from more than 97 per cent of the hospitals of the United States and its possessions, and covers 99.5 per cent of its hospital bed capacity; hence, it may be regarded as official in character. In making the survey, those in charge did not wholly rely on figures submitted by various institutions. Figures were checked and cross-checked, and every effort was made to have them as they are—reliable.

Much has been said concerning hospital bed occupancy. The average for the country is 66.3 per cent, and the Indiana record is 63.5 per cent. The State of Mississippi is low, with 45 per cent, while the District of Columbia is high with 91.3 per cent. We may facetiously remark that the seat of our government has in residence many officials, including senators and representatives, who are wont to take full advantage of free hospital services available in Washington.

Of governmental institutions, Indiana has 4 federal hospitals, 18 state hospitals, 34 county hospitals and 4 city hospitals, with one operated jointly by a county and a city. There are 29 church hospitals in Indiana, 1 fraternal and 22 non-profit institutions. There are 24 proprietary hospitals, these with 765 beds, with an average occupancy of 343. The governmental hospitals have 17,633 beds with average occupancy of 16,326. The church and non-profit group has 5,109 beds with 3,139 occupancy.

Indiana has eight institutions for mental cases, four of which have no excess of patients over the normal capacity, while one shows a fifteen per cent over-crowding and two have from fifteen to thirty per cent of excess patients.

Sixty-six of our group report a dental service, with 190 dentists in regular service. Of the technical personnel, Indiana has 78 laboratory technicians, 80 radiologists, 52 dietitians, 22 physical therapists, 37 pharmacists and 2 dental hygienists.

There was a net gain of four hospitals in Indiana in 1936, with an increase of some 20 per cent in the number of patients admitted, and this figure corresponds with the increase over the country and indicates that our folk are becoming hospital-minded. In 1926 there were reported 37 training schools for nurses, and in 1936 this number dwindled to 27, which is regarded as a very hopeful sign.

In addition to the hospitals listed, Indiana has 16 institutions with a capacity of 728 beds which were refused consideration in this report. Thirteen hospitals in Indiana are approved for internship, too few in proportion to the number of hospitals worthy of consideration. In 1936, 127 internships were offered with an average compensation of $26.29 per month, a little higher than the general average.

Clinical laboratory technicians may be trained in three Indiana institutions: the Indianapolis City Hospital, the Indianapolis Methodist Hospital, and the South Bend Medical Laboratory in connection with St. Joseph's and Epworth Hospitals in South Bend.

Intern libraries, long and grossly neglected, are considered in this issue of the *Journal of the American Medical Association*, and a list of worthwhile medical journals and books is given.

Comment is made that for 27 consecutive years there has been an increase of 20,000 hospital beds in the United States. While it is true that hospital bed occupancy is on the increase, we wonder if the oft-made claim, that too many hospitals are being built, is not well founded. That remains for others to ponder.

The *Journal of the American Medical Association* presents this material in a remarkably interesting and readable manner, presenting the American hospital situation as it really exists. We repeat that the complete report is well worth the time required for thorough study.

REFRACTION OF CHILDREN

The practice of some physicians in referring school children to optometrists for refraction has caused frequent comment, and we have had something to say on the subject of school teachers and even school nurses in giving their endorsement to such refractions. All children should be refracted under atropine, and perhaps sometime school authorities will recognize that fact. A resolution has been adopted by a joint committee of the National Education Association and the American Medical Association, under date of February, 1937, and it is of such vast importance that we present it in full:

> Whereas, The eyes and the sight of the school child are of the most vital importance for satisfactory school work, and their preservation for future health and efficiency depends upon their wise conservation during childhood; and
>
> Whereas, The school has a grave responsibility for the conservation of eyesight among school children; and
>
> Whereas, School administrators in many parts of the United States are frequently besieged with demands for admission into their school systems of eye examinations and eyeglass prescriptions by practitioners other than qualified doctors of medicine; and
>
> Whereas, The eye, as an organ of vital necessity, requires careful conservation and deserves treatment only at the hands of trained and competent persons; and
>
> Whereas, Teachers and nurses properly may and often do make rough tests of visual acuity in the classroom, but diagnosis of diseases of the eye and of disturbances of vision requires more extensive examination and often involves treatment other than the mere fitting of glasses; and
>
> Whereas, Even the fitting of glasses often requires the paralysis of accommodation through the use of drugs popularly known as "drops"; now therefore be it
>
> Resolved, That it is the sense of the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association, in meeting assembled at New Orleans, February 23, 1937, that the safety of the eyes of school children, the adequate diagnosis of disease and the correct fitting of glasses require examination of children's eyes (beyond rough visual tests performed by teachers or nurses) by a licensed doctor of medicine and, upon his recommendation, by a medical specialist in diseases of the eye, properly known as an oculist or ophthalmologist.

It will be noted that a "grave responsibility for the conservation of eyesight among school children" is finally recognized, after many years of importuning on the part of the medical profession. Further, "the eye . . . requires careful conservation and deserves treatment only at the hands of trained and competent persons." The medical profession has known these things for years and has made consistent efforts to impress these facts upon our educational groups, too often with little success. Now, however, the leading educational organization has come out boldly, with a definite stand. It remains for the medical profession to place these juvenile refractions where they belong, in the hands of trained oculists.

We have no quarrel with the optometrists. Some of them do very creditable refractions in adults; most of them fall down grievously with the juveniles. As we have mentioned before, the Guild, an organization of high-class optical stores, refuses to attempt juvenile refractions, referring every case to an oculist.

The above resolution was adopted at New Orleans during a meeting of the National Education Association in whose meeting certain departments of the American Medical Association joined.

A STRAW IN THE WIND?

The Marion *Chronicle* for April sixth editorializes upon a phase of the present agitation for venereal disease control, and the writer shows a rather extensive knowledge of the subject. He is quite bothered about what he terms a bit of backwardness on the part of the State of Indiana in getting into action in this campaign. He cites the fact that Illinois is preparing to take advantage of the federal offer of some $300,000, which sum is to be matched by the state, thus enabling Illinois to open a dozen or so treatment clinics. Further on in the editorial, the writer says, "In other words, those who have the money and can pay for the treatment are responding to the publicity, and for the most part cheering information has gone out to them through the public press. However, there are many who do not have the money to pay for treatment and the spread of the disease among these is most alarming. Other states are taking official cognizance of this condition and are providing funds by which it may be alleviated." And

a bit farther in the article appears this statement: "It seems to us that the medical associations of the state should be the first to move in the matter. They have the knowledge by which the activity could be properly and efficiently advanced. The physicians themselves know who should have treatment and a good deal about the personal financial circumstances of the affected people." All this may be but a straw in the wind, but certainly it indicates the wind direction. It should be remembered that at that now famous meeting in Chicago, Surgeon-General Parran made a plea for the cooperation of the medical profession in his proposed campaign against venereal diseases. It might also be well to refer to THE JOURNAL for December, 1936, and re-read the editorial "About Face — Forward March!" In that article you will find this statement: "The Washington officials have also done considerable 'to the rear marching!' They are a lot smarter than they were four years ago when they said to organized medicine, 'You take this program—or else!'" No, that was not actually said at the Chicago secretaries-editors conference, but at that time Dr. Parran made it plain that this program is going through, that he wants the medical profession to supply the captains, first mates, and crews, but that the end would be accomplished, somehow or other. The inference is clear. We have propagandized this venereal problem. The thinking and reading populace is ready and anxious that something be done about it. As we have consistently maintained, it is in the lap of medical Indiana. What are we going to do about it?

THE SECRETARIES' CONFERENCE

On the afternoon and evening of March 21, 1937, some two hundred county medical society officers gathered at the Columbia Club in Indianapolis for their annual meeting. Only two scheduled speakers failed to appear, and the whole meeting was regarded as one of the best of the many conferences that have gone before.

Much of the success of the conference was due to the fact that it was primarily an Indiana program. Most of the speakers were officers of local county medical societies, and there was an air of informality about the discussions which is noticeably lacking when a program is heavily loaded with out-of-state guests.

The Resettlement Administration came in for an early discussion, Dr. H. W. Shaw telling of his personal observations in his home community. Dr. Neal Matlock was unable to be present to tell about things down Medora way. Mr. M. E. Hays, Indianapolis Regional Cooperative specialist for the Resettlement Administrations, discussed his work from the standpoint of the health problem. Mr. Hays made a very favorable impression, strengthened when Dr. R. G. Williams, of Washington, national director of this group, was unavoidably detained and Mr. Hays was forced to "bat" in two positions in the lineup. Numerous questions were asked, resulting in a fair, clean-cut understanding of what it all means so far as Indiana is concerned.

Dr. Verne K. Harvey made an excellent presentation of his subject, "Adequate Local Full-Time Health Service." As usual, Dr. Harvey impressed all by his sincerity of purpose and his adequate knowledge of health conditions in Indiana.

Dr. James B. Maple, of Sullivan, long-time absentee from these gatherings because of a peculiar allergic condition, presented a discussion of some of the problems confronting a county medical society. His paper will be used in a forthcoming issue of THE JOURNAL.

Mr. Albert Stump, our Association's legal counsellor, discussed "Joint Meetings with Professional Groups," and advocated frequent meetings of physicians with dentists, lawyers, druggists, etc.

One of the honor guests was Dr. W. T. Lawson, of Danville, for fifty-six years secretary of the Hendricks County Medical Society.

The round-table on society matters went over in a big way. Several questions were presented for discussion, many of them evoking spirited debate. One southern Indiana secretary expressed in unmistakable language the opinion of his local group on one question, and the spontaneous applause that followed was interpreted to mean that such discussions were very much worth while.

The editor of THE JOURNAL briefly told of the manner in which various articles for publication in THE JOURNAL are selected.

Dr. Norman Beatty gave a comprehensive picture of the legislative situation as he had observed it during the 1937 biennial session.

Dr. A. M. Mitchell, of Terre Haute, was again selected as chairman of the Conference for 1938.

The evening speaker was Dr. Charles Gordon Heyd, president of the American Medical Association, who spoke on "The Service of the American Medical Association to Society." Dr. Heyd, always a good speaker, was "tops" on this occasion, and his address scintillated with wit coupled with as much red meat as could be put into one evening's talk. Thus ended the most successful conference in our history. All who attended felt amply repaid, and they took back to the home folk sufficient material for discussion in many meetings.

EDITORIAL NOTES

May is Postgraduate Month for physicians in Indiana. Complete programs for the postgraduate courses sponsored by the Indiana State Medical Association and the Indiana University School of Medicine, May 10 to 14, are printed on pages 258 and 259. Programs for district meetings to be held in May are printed on page 260. The wealth of material and the talent of the speakers on these programs combine to offer an opportunity that you cannot afford to miss. These programs are arranged for YOU.

Are you planning your vacation?

May twelfth is National Hospital Day. Carefully planned programs will be carried out by 102 Indiana hospitals. This year Mr. Albert G. Hahn, administrator of the Protestant Deaconess Hospital at Evansville, is chairman of the National Committee for National Hospital Day for the American Hospital Association. On May twelfth interested persons may visit the hospitals, be shown through them and told of the work that is done in caring for the 700,000 men, women, and children who are served daily in hospital beds all over the country. National Hospital Day, commemorating Florence Nightingale's birthday, is appropriately observed in Canada, China, Alaska, Australia and other lands. The chief object is to encourage the public to know hospitals better. Tell your patients about it.

Numerous newspaper clippings received recently indicate an increasing number of automobile accidents in which physicians are involved. Within the past few weeks, four Indiana physicians have had serious injuries in such accidents. Three were on their way to visit patients; one was hurrying a patient to the hospital for an emergency operation. Skill and care is required to manage an automobile in modern traffic, and when those qualities are sacrificed for speed, the almost inevitable result is a disastrous accident. Drive carefully!

The Bureau of Internal Revenue has called attention to the fact that many employers who have less than eight employes in their service have failed to file tax returns for the month of January as required by the Federal Social Security Act. Monthly returns must be filed by every employer who has one or more employes other than domestic servants (and the specific exemptions mentioned by the Act). Physicians who have failed to file tax returns as employers should take immediate action to correct the error. Returns for February were due on or before March 31, and a return for each subsequent month is due on or before the last day of the month following that on which it is made. Proper forms will be supplied by the local collector of internal revenue on request. Delinquency penalties in the amount of 5 per cent per month with a maximum of 25 per cent are assessable, in addition to the 6 per cent yearly interest on the unpaid tax.

Dr. William N. Wishard returned in March from a midwinter vacation spent in California. While in Los Angeles, Dr. Wishard visited the Los Angeles County Hospital, at the invitation of a group of urologists, and participated in a clinic there. Several Indiana University graduates who had been Dr. Wishard's students and who are now located in Los Angeles, called upon him and added much to the pleasure of a physician who enjoys being busy every minute with things medical, vacation or no vacation.

The official call to the officers, fellows and members of the American Medical Association has been issued for the eighty-eighth annual session of the Association which will be held in Atlantic City, June seventh to eleventh. The House of Delegates will convene on Monday, June seventh. The scientific meetings will open on Tuesday, June eighth. Section meetings will be held on Wednesday, June ninth.

The preliminary draft of the program for the French Lick meeting is very impressive. Our Scientific Program Committee has not been wasting time. We like the idea of starting the program on Monday and continuing through Wednesday. It gives one an opportunity to be there on Sunday evening, all set for the big doings the following morning. Advice from the hotel management is to the effect that no effort will be spared to make our stay at French Lick a delightful one. The more serious part of the program is of unusual quality, so we are assured of a worthwhile educational vacation. It is not too early to make your hotel reservations—the early comers get the best assignments, though every room in that famous hostelry is a comfortable one. However, you'd better write that letter to Tom Taggart today.

A series of conferences by members of the executive committee of the Indiana State Medical Association and officials of the Resettlement Administration for this region have resulted in a program for medical care of Resettlement Administration

clients in Indiana. The outlined plan is published on page 257. It recommends procedures to be followed by physicians and by officials of the Resettlement Administration to insure close cooperation between the two groups, and if the recommendations are followed, there is little doubt that the program will be carried out effectively and agreeably to all concerned. Cooperation is one of the fundamentals for success in these enterprises.

The Executive Committee of the Indiana State Medical Association has ruled that medical defense privileges are included in honorary memberships in the Indiana State Medical Association in consideration of the fact that such members have contributed regularly to that fund for many years. According to the Constitution of the Indiana State Medical Association, an honorary member is "any physician of the State of Indiana who has attained the age of seventy-five years and has held membership in the Indiana State Medical Association for twenty years or more," and he is "elected to honorary membership by vote of the House of Delegates, provided his name be proposed for such honorary membership by the county medical society of which such physician is a member."

The Indianapolis Ophthalmological and Otolaryngological Society, together with the Department of Otolaryngology of the Indiana University School of Medicine, recently tendered a banquet in honor of Dr. John F. Barnhill, long-time head of the department of head surgery in the medical school. "Uncle Jeff," as he is familiarly known to hundreds of Indiana physicians, certainly merits the honor thus bestowed. Our first acquaintance with him dates back to 1898, when he occupied the chair of physiology; later he was transferred to the head of the otolaryngological department, which position he occupied for many years. As a teacher, Dr. Barnhill, to use popular parlance, is a "natural." He has the happy faculty of imparting his knowledge in a manner possessed by few men. THE JOURNAL compliments Dr. Barnhill upon his accomplishments and the sponsors of the banquet for their recognition of his merit.

For a good many years we have listened to and talked to A. M. A. presidents, some of whom we have come to know pretty well. They are a likable group, all very much interested in doing what they can to further the interests of their profession. When they have talked about conditions in this and that section of the country, we wonder how they manage to get over so much territory. Dr. Gordon Heyd answered this query for us recently when he said that many of his trips are made by aeroplane. For example, he left Indianapolis about midnight, following the recent Secretaries' Conference, and arrived in New York a half dozen hours later, in plenty of time to spruce up and appear at his office for his usual hours. The *Journal of the American Medical Association* weekly publishes an itinerary of the president and of several other officials; it is worth your time to look it over and gain some idea of just what these folk are doing for you and me.

More about directories. Last month we warned against the investment of ten dollars to have your name included in a directory supposedly used by insurance companies in selecting physicians to care for insurance cases. Not wishing to do any one an injustice, we wrote letters to various reputable insurance companies, inquiring about the directory and the companies' use of it. The replies thus far received have substantiated our belief that the directory is practically worthless. One of the leading companies says, "Our company does not use this directory in selecting its examiners and we have so advised the considerable number of physicians who have made inquiry of us." A small company says, " . . . we were sent one of the . . . directories and have had very little occasion to use it." All of the replies are in the same vein—none seem to have respect or use for the directory. There is no reason to change the admonition given last month—save your ten dollars!

The French Chamber of Deputies has for some time had under consideration a bill calling for the compulsory retirement of physicians at the age of sixty-five years. Present information indicates that the bill will not pass; however, it seems to have a rather large number of supporters. To us the proposal seems preposterous. The physician of today, arriving at the age of sixty-five, is possessed of a wealth of medical information that should be available to those who need such services for many years to come. The intriguing thing is the fact that the proposal is but another instance of uninformed individuals attempting to regulate the practice of medicine. What of the almost forgotten, but now revered, family physician? Shall he retire because he has reached the age of sixty-five? Will those who for years have depended upon him in times of family illnesses be deprived of the comfort that can come only from such a man? We have heard of no such discussions in our country, but it behooves us to be on the alert for there seem to be supernumeracy "messers" who want to direct the affairs of our profession.

A member of the Indiana legislature recently remarked to us that "when anything 'screwy' develops in a session of the Indiana legislature, it is certain that some member from ——— county is mixed up in it." We paraphrase by saying that when something unheard of must take place, it seems to fall to the lot of Indiana to serve as the arena, for what seems to us to be the extreme ultimate in the present series of sit-down strikes took place in a western Indiana city a few days ago when the employees of a hospital resorted to a sit-down strike to gain their point. Yes, they actually tied up hospital activities completely, and had it not been for the members of the families of attending medical men who came to the fore, no one can say what might have been the result. This strike craze has reached unbelievable proportions when employees willfully desert helpless folk. When Calvin Coolidge was governor of Massachusetts, we thought he settled that question when he ended the policeman-fireman strikes in Boston. Such things have been taboo in America and should not be tolerated for a single moment.

"The Unsung Hero of the Great Flood" is the title of a three-page article in the April 1 issue of the *New York State Journal of Medicine*. This article is written from a description of Indiana flood conditions in our March JOURNAL, and it goes on to state that while the story is about Indiana, it applies equally well to flood conditions and medical relief in the states of Ohio, Kentucky and Illinois. The writer enthusiastically discussed the role of medicine in this, the greatest flood in the history of the Ohio Valley. We are grateful for the comment and wish that every member of our Association might read it. The citizenry of this country occasionally wanders away from the beaten path and listens to the blandishments and "come on" arguments of the quack, the irregular, the patent medicine radio blah and the pseudo-healers, but we note that in times of stress and upon occasions when local and national disasters of various sorts threaten, the call is "Get the doctor," and they mean a physician, a Simon-pure M.D., a Man of Medicine! Never in the history of the profession has this call been made in vain in times of great need.

The Indianapolis *Star* for March 24th pays a pleasing tribute to Indiana Medicine in its discussion of the goings-on at the recent Secretaries' Conference. In speaking of the fight against socialized medicine, the editorial states: "The Hoosier physicians have not conducted the offensive warfare waged in some states. They are relying on the effect of a widespread educational program to convince the public of socialized medicine's grave defects." Dr. Gordon Heyd, president of the American Medical Association, is quoted in the article, particularly his reference to the traditional relationship of the family doctor with the patient, which is the very thing we have stressed since this agitation first began. Concluding the excellent editorial, the writer says, "The medical profession has a proud record to maintain; its constant labor for improvement of the general health, the advances confidently expected if the future of the present system is continued, and the vast amount of charity services rendered entitle the members of organized medicine to a sympathetic hearing in their opposition to the encroachment of socialism in public and private medical relationships." We thank the *Star* for these truisms.

For some time past we have been receiving communications from the American Foundation Studies in Government. We have read them carefully, though we must admit that in the reading our fingers were crossed and thoughts of the five-year study of the Committee on the Costs of Medical Care continually recurred. In short, no conclusion in regard to the matter was reached. Now that the complete and final report of the Foundation's study is published, it is apparent that the medical profession will show some degree of interest in that publication. Occasionally we have been importuned to comment editorially on the subject but refrained from doing so because of two things: (1) lack of understanding of the whole matter; (2) an innate prejudice to those things which, at least on the surface, appear inimical to the best interests of our profession. When Dr. Leland gave a report of his visit to the New York office of the American Foundation Studies in Government, we were somewhat nonplussed as to how we should interpret that interview. As has been our custom in previous similar situations when our understanding was not quite up to par, we awaited a formal discussion of the subject by those at the headquarters of the American Medical Association. The *Journal of the American Medical Association* for April tenth, in the editorial section and in the section devoted to economics, admirably answers our questions. The editorial[1] (unusually long for Morris Fishbein) is a masterpiece in that it presents a clean cut, definite picture, wholly unbiased. The editorial and the abstract[2] of the whole study offers the reader a concise and understandable resume. We will not comment on these articles other than to say that every member of the medical profession will do well to read them carefully.

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[1] Editorial: American Foundation Studies in Government. *J.A.M.A.*, Vol. 108, No. 15, April 10, 1937, p. 1262.

[2] The American Foundation Study of Medical Care. *Organization Section of J.A.M.A.*, Vol. 108, No. 15, April 10, 1937, p. 117B.

Elmer H. Bobst, president of Hoffmann La Roche, Inc. (unfortunately not one of our advertisers), has written an editorial in the *Roche Review* for April, 1937, entitled "Mental Crutches." The editorial is so well written that we reprint it for you here:

" 'As music is harmonious (sic) controlled by its Principle, so man governed by his Principle of being, by Soul and not sense, is harmonious, sinless and immortal.' From whence came this ungrammatical tidbit of dogmatic philosophy with its captivating analogy? Devout followers of that remarkable woman, best known as Mary Baker Eddy, could tell you. They know their *Science and Health* and would proudly refer you to 117:29, and there you would find it together with many beautifully polished phrases strangely intermingled with much cheap and gaudy verbal bric-a-brac of lowly creation. It has long been known that Mrs. Eddy acquired her first knowledge of the theory and practice of mental healing from the village clockmaker, Quimby, and that she eventually appropriated his stuff—lock, stock, and barrel. But, as Mark Twain wrote while Mrs. Eddy was still alive, 'The immense contrast between the legitimate English of *Scienee and Health* and the bastard English of Mrs. Eddy's miscellaneous work, and between the maturity of one's diction and the juvenility of the other, suggests—compels—the question, Are there two guns?'

"Mark was right. My opening quotation and many other philosophical reflections in *Science and Health* which seemingly provide the key to the method of mental self protection and all healing and 'new unfoldment,' as some one has put it, came to Mrs. Eddy by divine inspiration at second hand through Lieber's essay on the German philosopher Hegel. In other words, Mary had a very marked and uncontrollable penchant for dressing herself up in other people's garments and parading them to the high heavens as her own. And although her education was so limited that she could not even copy correctly, she was exceedingly shrewd. I have just read the whole story in the recently published book by Haushalter, *Mrs. Eddy Purloins from Hegel.* Haushalter shows in unmistakable fashion that Mrs. Eddy's claim to authorship of *Science and Health* is a brazen hoax with far-reaching implications, inasmuch as the book is 'scripture' to very many people. And now, since by this expose it has been proved that Mary Baker Eddy was one of the boldest plagiarists of all time, will the backbone of Christian Science be broken? Will the hundreds of thousands of faith-cure cultists of America turn about face and abandon their views? Absolutely not. And the reason for their steadfastness is easy to find. They won't give up their 'Science' and other similar cults because, on the whole, these philosophies have proved to be good mental crutches to lean on. Few of us, even the strongest, can successfully march through the vicissitudes of life without the need of a mental crutch from time to time. This applies particularly when we are ill.

"I have met many physicians in my time and I have always taken an intense interest in their equipment, both as to professional ability and as to personality. As a general rule I have found American physicians up-to-date in every respect, ready to give their patients the latest scientific remedy and the best of advice. The one aspect, however, of the physician's make-up which, in many cases, has not been sufficiently developed, and which I consider so essential to successful medical practice, is the very thing which Christian Science uses to the exclusion of everything else, and that is the ability to provide the mental crutch. But Christian Science is a malignant fallacy in that it shuts its eyes to corporeal disease and attempts to heal all ailments by changing the patient's mental attitude. Medicine, on the other hand, concerns itself with pathology and rational therapeutics, and most of its practitioners are so wrapped up in the soma as to completely ignore the benefits to be derived from giving adequate attention to the psyche.

"In my humble opinion every physician ought to make a genuine effort to develop his abilities along this oft neglected line. I think physicians will agree with me that the best therapeutic results are obtained by those who have the gift of winning the confidence of the patient, of bringing good cheer into the sick-room, and of imparting in this way the utmost psychological benefit as an adjuvant to whatever medication or physical therapy may be indicated. Should not, then, medical schools devote more attention to the personality aspects of the physicians they train? Should not practical courses in the psychology of handling patients be added to the curricula? It is difficult for me to give the thing I have in mind an appropriate name. Mark Antony, Shakespeare's plain blunt man, might have called it Salesmanship. Call it by another name if you choose. But physicians must 'sell' themselves. It is only when the rank and file of the medical profession, and not neurologist and psychiatrist alone, are able to provide mental crutches for patients who need them that we will begin to see deflections from the ranks of the faith cults and a gradual dissipation of the other fallacious therapeutic systems which menace the health of our people and make serious inroads into the economic stability of legitimate medical practice."

PLAN TO ATTEND THE
POSTGRADUATE MEETING
IN INDIANAPOLIS, MAY 10-14.

YOUR DISTRICT PROGRAM
IS PRINTED ON PAGE 260.

A PROGRAM FOR MEDICAL CARE FOR RESETTLEMENT CLIENTS IN INDIANA

The executive committee of the Indiana State Medical Association and representatives of the Resettlement Administration suggest the following program as a result of a series of conferences, to provide medical care for the clients of the Resettlement Administration in Indiana. An outline of the program suggested is as follows:

I. (a) That the County Medical Societies recommend to the physicians in their counties that they furnish to the Resettlement Administration clients and their families the services usually rendered by a family physician at such fees as the families are able to pay. This service is to consist of home and office care, including obstetrical care and ordinary drugs. It will not include major operations or hospitalization.

(b) A specified maximum fee for all surgical operations shall be agreed to by representatives of the Resettlement Administration and each county medical society.

II. The Indiana State Medical Association will recommend:

(a) To the County Medical Societies that they urge the physicians of their counties to co-operate with the Resettlement Administration in the matter of providing medical care for their clients.

(b) That all questions concerning bills for medical services rendered under any program that is drawn up with the Resettlement Administration be referred to a committee of the local County Medical Society composed of the president, secretary, and board of censors. If this committee cannot come to an agreement in regard to these bills with all parties concerned, the questions will then be referred to the Executive Committee of the Indiana State Medical Association.

(c) That the County Medical Society work with the County Rural Rehabilitation Supervisor and advise him of the physicians who have agreed to participate in this program.

III. The Resettlement Administration will:

(a) Have a representative, the local Rural Rehabilitation Supervisor, meet with the officers of the County Medical Society and advise them who are Resettlement Administration clients in the county.

(b) The County Rural Rehabilitation Supervisor will advise the clients of the names of physicians who are willing to cooperate. The client will select the physician of his choice. The County Rural Rehabilitation Supervisor will then give to the client a memorandum for the physician showing that he is a client of the Resettlement Administration. The client and physician will then work out an agreement.

(c) 1. The County Rural Rehabilitation Supervisor will take an application for loans for the payment of the fee agreed upon. If the loan is approved, the Supervisor will advise the physician. These funds will be made available for payment at such intervals as may be deemed advisable; payments to be made after the services have been rendered.

2. The Rural Rehabilitation Supervisor will endeavor to secure funds either through grants or loans to take care of emergency surgical cases.

(d) The representatives of the Resettlement Administration, State and Regional, will work with the Indiana State Medical Association in this program, it being thoroughly understood by the Resettlement Administration representatives that such a program will be made available only to those low-income farm families that are the responsibility of the Resettlement Administration.

POSTGRADUATE PROGRAM OF THE INDIANA UNIVERSITY SCHOOL OF MEDICINE AND THE INDIANA STATE MEDICAL ASSOCIATION WILL BE PRESENTED IN INDIANAPOLIS, MAY 10-14.

(Turn the Page)

Annual Post Graduate Course of the INDIANA UNIVERSITY SCHOOL OF MEDICINE INDIANA STATE MEDICAL ASSOCIATION

MAY 10-14, 1937

All morning and afternoon sessions will be held at the University Medical School; all evening meetings will be held in the Lincoln Hotel, except the public meeting, Friday evening, which will be held at Caleb Mills Hall, Shortridge High School

Monday, May 10

8:00 to 9:00 a. m.—Registration.

8:00 to 9:00 a. m. Heart Clinic.
STANLEY GIBSON, M.D.
Chicago, Associate Professor of Pediatrics, Northwestern University Medical School.

9:00 to 10:00 a. m. Nephritic Clinic.
C. A. ALDRICH, M.D.
Winnetka, Ill., Associate Professor of Pediatrics, Northwestern University Medical School.

10:00 to 11:00 a.m. Pediatric Clinic.
A. D. KAISER, M.D.
Rochester, N. Y., Associate Professor of Pediatrics, University of Rochester School of Medicine.

11:00 a. m. to noon: Lecture on **Vitamines.**

Recess for luncheon

1:30 to 2:30 p. m. Round-table discussion on **Treatment of Acute Respiratory Infections in Children.**

2:30 to 3:30 p. m. The Tonsil Problem.
A. D. KAISER, M.D.
Rochester, N. Y.

3:30 to 5:00 p. m. Clinical pathological conference, with Samuel A. Levine, M.D., participating.

Recess for dinner

8:00 p. m. Guest Speaker,
SAMUEL A. LEVINE, M.D.
Boston, Assistant Professor of Medicine, Harvard University Medical School.
Subject: **Cardiology.**

Tuesday, May 11

8:00 to 11:00 a. m. Clinics on **Cardiovascular Renal Diseases, Surgery, Gynecology, Medicine, and Otolaryngology.**

11:00 a. m. to noon: **Therapeutic Aphorisms.**



S. A. Levine, M.D.
Boston



Vernon C. David, M.D.
Chicago



N. J. Eastman, M.D.
Baltimore

Recess for luncheon

1:30 to 2:30 p. m. Panel discussion on **Medicine.**

2:30 to 3:30 p. m. Practical demonstration on **Intravenous Therapy.**

3:30 to 5:00 p. m. Clinical pathological conference, with Vernon C. David, M.D., participating.

Recess for dinner

8:00 p. m. Guest Speaker,
VERNON C. DAVID, M.D.
Chicago, clinical professor of Surgery, Rush Medical College.
Surgical subject.

Wednesday, May 12

8:00 p. m. to 11:00 a. m. Clinics on **Orthopedics, Dermatology, Roentgenology, Surgery, and Obstetrics.**

11:00 a. m. to noon. Modern Treatment of **Pneumonia.**

Recess for luncheon

1:30 to 2:30 p. m. Panel discussion on **Surgery.**

2:30 to 3:30 p. m. Practical demonstration on **Aseptic Technic and Splints.**

3:30 to 5:00 p. m. Clinical pathological conferences, with Nicholson J. Eastman, M.D., Baltimore, and Frank C. Mann, M.D., Rochester, Minnesota, participating.

Recess for dinner

8:00 p. m. Guest speakers,
NICHOLSON J. EASTMAN, M.D.
Baltimore, professor of Obstetrics, Johns Hopkins University School of Medicine.
Subject: Obstetrics.

Presented at the
INDIANA UNIVERSITY SCHOOL OF MEDICINE
AND THE LINCOLN HOTEL — TRAVERTINE ROOM

MAY 10-14, 1937

All morning and afternoon sessions will be held at the University Medical School; all evening meetings will be held in the Lincoln Hotel, except the public meeting, Friday evening, which will be held at Caleb Mills Hall, Shortridge High School

FRANK C. MANN, M.D.

Rochester, Minnesota, professor of Pathology, Surgery, and Experimental Physiology, University of Minnesota Graduate School of Medicine.

Subject: Physiology.



Frank C. Mann, M.D.
Rochester, Minnesota

Thursday, May 13

8:00 to 11:00 a. m. **Clinics on Urology, Pediatrics, Otolaryngology, Medicine, Neurology and Psychiatry.**

11:00 a. m. to noon. **Medical Jurisprudence.**

Recess for luncheon

1:30 to 2:30 p. m. Panel discussion on **Obstetrics.**

2:30 to 3:30 p. m. Practical demonstration on **Obstetrics.**

3:30 to 5:00 p. m. Clinical Pathological Conference with Harold N. Cole, M.D., participating.



H. N. Cole, M.D.
Cleveland

Reeess for dinner

8:00 p. m. Guest Speaker,

HAROLD N. COLE, M.D.

Cleveland, Ohio, associate clinical professor of Dermatology and Syphilology, Western Reserve University School of Medicine.

Subject: **Syphilis.**



Prof. Maude Slye
Chicago

Friday, May 14

8:00 to 11:00 a. m. Clinics on **Cardiovascular-renal Diseases, Surgery, Dermatology, Gastro - intestinal Diseases, and Ophthalmology.**

11:00 a. m. to noon. Urologic and Orthopedic Aphorisms.

Recess for luncheon

1:30 to 2:30 p. m. Panel discussion on **Therapeutics.**

2:30 to 3:30 p. m. Practical demonstration on **Dermatology and Urethral Instrumentation.**

3:30 p. m. Guest speaker,

ELLIOTT C. CUTLER, M.D.

Boston, Professor of Surgery, Harvard Medical School.

Subject: **Cicatrizing Enteritis.**

Recess for dinner

PUBLIC MEETING

Caleb Mills Hall, Shortridge High School

8:00 p. m. Speaker,

PROFESSOR MAUDE SLYE

Associate professor of Pathology, University of Chicago.

Subject: **Cancer.**

COMMITTEE ON GRADUATE EDUCATION

L. A. Ensminger, Indianapolis, Chairman
C. J. Clark, Indianapolis
John Owen, Indianapolis
J. K. Berman, Indianapolis
L. H. Segar, Indianapolis
W. N. Wishard, Jr., Indianapolis

PROGRAMS FOR DISTRICT SOCIETY MEETINGS

Programs for the eighth, ninth, eleventh and twelfth districts were arranged through the cooperation of the district society officers with the Committee on Postgraduate Education of the Indiana State Medical Association and the Bureau of Maternal and Child Health of the Indiana State Board of Health.

FIRST DISTRICT

June 17, 1937, at Evansville Country Club

Officers

President: G. C. Johnson, M.D., Evansville.
Secretary: K. T. Meyer, M.D., Evansville.
Councilor: I. C. Barclay, M.D., Evansville.

Program

Golf in the afternoon.
Scientific program in evening.
(Definite program not received.)

THIRD DISTRICT

May 12, 1937, at Jeffersonville

Officers

President: Austin Funk, M.D., Jeffersonville.
Secretary: Carl Schoen, M.D., New Albany.
Councilor: H. C. Ragsdale, M.D., Bedford.

Program

1. "The Acute Abdomen." By Irvin Abell, M.D., Louisville, Kentucky.
2. "Delivery of Siamese Twins." Case Report. By R. W. Bruner, M.D., Jeffersonville.
3. "Emergency Hospitals in New Albany During the Flood." By P. R. Pierson, M.D., New Albany.

FOURTH DISTRICT

May 26, 1937, at North Vernon

Officers

President: W. H. Stemm, M.D., North Vernon.
Secretary: D. L. McAuliffe, M.D., North Vernon.
Councilor: M. C. McKain, M.D., Columbus.
(Program not received.)

FIFTH DISTRICT

May 7, 1937, at the Hotel Deming in Terre Haute

Officers

President: A. W. Cavins, M.D., Terre Haute.
Secretary: James V. Richart, M.D., Terre Haute.
Councilor: O. O. Alexander, M. D., Terre Haute.

This meeting of the Fifth District Medical Society will be held jointly with the Terre Haute Academy of Medicine, the Vigo County Medical Society and the Æsculapian Medical Society.

Program

The program will begin at 6:30 p. m.

Guest speaker will be Dr. Walter C. Alvarez of the Mayo Clinic, Rochester, Minnesota.



Cameron Haight, M.D.



H. A. Rosenbaum, M.D.



G. C. Prather, M.D.

SIXTH DISTRICT

May 20, 1937, at Greenfield

Officers

President: J. L. Allen, M.D., Greenfield.
Secretary: Frank Green, Jr., M.D., Rushville.
Councilor: Samuel Kennedy, M.D., Shelbyville.
(Program not received.)

EIGHTH DISTRICT

May 5, 1937, at Anderson

(Meeting to Be Held at Eagles Home, 1315 Meridian St.)

Officers

President: V. G. McDonald, M.D., Anderson.
Secretary: E. H. M. Clauser, M.D., Muncie.
Councilor: M. A. Austin, M. D., Anderson.

Program

AFTERNOON MEETING

2:00 P. M.—"Activities of State Association."
E. D. Clark, M.D., President, Indiana State Medical Association.
Mr. T. A. Hendricks, Executive Secretary, State Association.

2:20 P. M.—"Activities of Bureau of Maternal and Child Health of Indiana State Board of Health."
Howard B. Mettel, M.D., Chief of Bureau.

2:30 P. M.—"Scarlet Fever."
Gladys R. Dick, M.D., Evanston, Illinois. Associate at McCormick's Institute, Chicago, Illinois.
Discussant—O. B. Nesbit, M.D., Director of Medical Inspection, Gary Public Schools.

3:15 P. M.—Surgical Treatment of Chest Conditions in Children."
Cameron Haight, M.D., Assistant Professor of Surgery, University of Michigan, Ann Arbor.
Discussant—E. Vernon Hahn, M.D., Indianapolis.

4:00 P. M. — "Prophylaxis and Treatment of Syphilis in Children."
Harold A. Rosenbaum, M.D., Children's Memorial Hospital, University of Illinois, Chicago.
Discussant — Ferd A. Weyerbacher, M.D., Department of Syphilology, Indiana University School of Medicine.

BUFFET DINNER — 6:00 P. M.

8:00 P. M. — "Urological Pathology in the Pregnant Woman."
George C. Prather, M.D., Urologist, of Boston, Massachusetts, Assistant in Anatomy, Harvard University School of Medicine.
Discussants—H. G. Hamer, M.D., and H. O. Mertz, M.D., Indianapolis, Clinical Professors of Genito-Urinary Surgery, Indiana University School of Medicine.

NINTH DISTRICT

May 18, 1937, at Crawfordsville

Officers

President: Robert J. Millis, M.D., Crawfordsville.

Secretary: John L. Sharp, M.D., Crawfordsville.

Councilor: F. T. Romberger, M.D., Lafayette.

Program

MORNING PROGRAM

8:30 A. M. — Registration at Masonic Temple.

9:00 A. M.—Annual Golf Tournament at Crawfordsville Country Club.

10:30 A. M. — Heart Clinic by A. C. Barnes, M.D., Department of Cardiology, Mayo Clinic, at Culver Hospital.

12:00 NOON—Luncheon of Officers and Delegates at Crawfordsville Country Club.



Arlie R. Barnes, M.D.



Bernard Fantus, M.D.



E. D. Plass, M.D.

AFTERNOON PROGRAM

1:15 P. M. — Luncheon for ladies and bridge party at Crawfordsville Country Club.

2:00 P. M.—Scientific Program at Masonic Temple.
A. C. Barnes, M.D., Department of Cardiology, Mayo Clinic.
"Heart Disease."

3:00 P. M.—Jerome R. Head, M.D., Naperville, Illinois.
"Surgical Treatment of Pulmonary Tuberculosis."

4:00 P. M.—C. O. McCormick, M.D., Professor, Department of Obstetrics, Indiana University School of Medicine, Indianapolis.
"Analgesia in Labor — Modified Gwathmey Technique."

6:30 P. M. — Annual Banquet, at Masonic Temple. Speaker, "Dusty" Miller, of Wilmington, Ohio.

ELEVENTH DISTRICT

May 19, 1937, at Wabash

(Meeting to Be Held at Armory on S. Wabash St.)

Officers

President: M. J. Lewis, M.D., Marion.

Secretary: O. G. Brubaker, M.D., North Manchester.

Councilor: Ira Perry, M.D., North Manchester.

Program

MORNING SESSION

10:00-12:00 NOON — Wabash County Hospital.
Clinic on heart diseases—Rheumatic Fever, Congenital Heart Diseases, Case Demonstration — George S. Bond, M.D., Professor of Cardiology, Indiana University School of Medicine, Indianapolis.

AFTERNOON SESSION

1:30 P. M.—Business Meetings.

1:30 P. M.—Reception for Ladies at the Armory.

2:00 P. M.—"Activities of the State Association."
E. D. Clark, M.D., President, Indiana State Medical Association.
T. A. Hendricks, Executive Secretary, State Association.

2:15 P. M.—DeLee's Obstetrical Films, "Complications of the Second Stage," and "Post Partum Hemorrhage."

2:45 P. M. — "Hemorrhage As a Complication of Pregnancy."

H. F. Beckman, M.D., Professor of Obstetrics, Indiana University School of Medicine, Indianapolis.

3:15 P. M.—"Some Useful Prescriptions."
Bernard Fantus, M.D., Professor of Therapeutics, Illinois University School of Medicine, Chicago.

4:15 P. M.—"Headaches of Ocular Origin."
W. R. Hickman, M.D., Logansport, Indiana.

6:00 P. M.—BANQUET AT ARMORY

7:30 P. M. (Combined meeting of medical, dental, and all official health agencies.)

"Social Aspects of Sickness."

R. L. Sensenich, M.D., South Bend, Past President of Indiana State Medical Association.

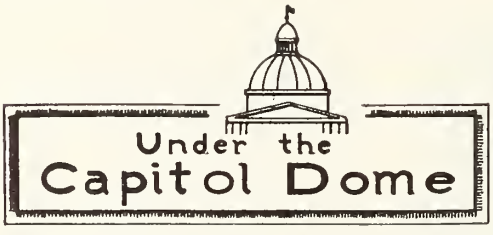
TWELFTH DISTRICT

Officers

President: C. E. Munk, M.D., Kendallville.
Secretary: A. J. Sparks, M.D., Fort Wayne.
Councilor: E. M. VanBuskirk, M.D., Fort Wayne.

Program

The program arranged for May 27, 1937, in Fort Wayne, has been postponed until fall because of Dr. Morris Fishbein's inability to be present as scheduled. Dr. Fishbein has promised to attend the fall meeting.



The annual examination of applicants for medical licenses will be conducted by the state board of medical registration and examination June 22, 23, and 24, the board has announced. The examinations will be held on the ninth floor of the Indianapolis Athletic Club. The full board will be in charge.

Applicants for an Indiana license to practice medicine under the reciprocal agreement with Illinois was conducted by the state board of medical registration and examination at the Indiana University hospitals April 7.

Those who successfully passed the examination were: Dr. Grace M. Hawthorne, who will practice at Evansville; Dr. Philip H. Kreuscher; Dr. Benjamin B. Cohen, who will practice at Indiana Harbor; Dr. Chauncey T. Shearer, who will practice at Richmond; Dr. J. Winford Mather, and Dr. Thomas D. Armstrong, who will practice at Michigan City.

Dr. Verne K. Harvey, secretary of the state board of health, and three officials of his department have just returned from Washington where they attended meetings of the Conference of State and Provincial Health Officers of North America and the State and Territorial Health Officers Conference of the United States. The meetings were called by Surgeon General Thomas Parran. Those who accompanied Dr. Harvey were B. A. Poole, chief engineer of the state health department; Dr. John W. Feree, chief of the bureau of local health administration, and Dr. Howard B. Mettel, chief of the bureau of maternal and child health. Dr. Harvey was chairman of a committee on disaster relief, and a member of the committee on training public health personnel, the committee on maternal and child health programs, and the committee on records and reports.

TRAILER MENACE

The use of automobile trailers is becoming so extensive that they are now presenting a serious health problem, according to Dr. Verne K. Harvey, secretary of the state board of health.

Dr. Harvey said that he will ask members of the state board of health to consider the issuance of a set of rules and regulations to cover health angles of trailers operating in Indiana. These proposed regulations also would apply to trailer camps.

The two most serious problems relative to use of trailers as temporary homes are those of sewage disposal and garbage disposal. A regulation to require a sewage connection of some approved type at trailer camps, with necessary equipment on the trailers, is one of those under consideration. The problem is somewhat complicated because in some cases trailer dwellers stopping in camps use toilet facilities of the camps, while others do not. The state health department already has authority to regulate camps and they are now required to have approved water supplies and sanitary units. The camps are licensed by the health department.

Just how extensive the regulations will be has not been determined, Dr. Harvey said. The tran-

sitory nature of trailer dwellers makes the problem one difficult to approach, he said.

WPA PROVIDES HOUSEKEEPING AIDES

The Division of Women's and Professional Projects of the Works Progress Administration of Indiana provides free assistance in housework and care of children in homes of the needy when the home-maker is totally or partially incapacitated because of ill health, confinement, or similar reasons. These projects are sponsored by local boards of health or township trustees, and are in operation in the following twenty-five cities: Elkhart, Mishawaka, South Bend, Fort Wayne, Marion, Peru, Wabash, Muncie, Kokomo, Anderson, Richmond, Jeffersonville, New Albany, Indianapolis, Hammond, Gary, Michigan City, Logansport, Clinton, Terre Haute, Vincennes, West Terre Haute, Bedford, Bloomington, and Evansville. These aides do housework only; they do no nursing. Some Indiana physicians already have utilized the help offered for needy patients. Detailed information concerning the work done may be obtained by addressing the District Supervisor of Women's and Professional Projects, WPA of Indiana, 217 North Senate Avenue, Indianapolis.

INTERNAL REVENUE COLLECTIONS

Internal revenue collections from all sources in Indiana for the month of March, 1937, were $16,000,936.97, as compared to $9,966,811.79 for the same month last year, an increase of $6,034,125.18. Some of the more important items of income on a comparative basis for the two months are as follows:

	1936	1937
Income Tax	$5,554,533.96	$9,717,616.06
Distilled Spirits Tax	2,209,233.36	3,506,515.83
Beer Tax	756,474.59	758,747.20
Estate Tax	120,755.86	260,281.52
Gift Tax	678,601.44	48,695.02
Electric Energy Tax	70,011.93	87,035.34
Autos and Parts Tax	140,402.04	75,058.26
Admissions and Dues Tax	10,211.57	11,628.74
Capital Stock Tax	1,831.91	5,401.21
Social Security Tax	.00	789,920.18

The total collections from all sources for the nine-month period ended March 31, 1937, was $62,573,199.24 as against $52,056,487.17 for the same period ended March 31, 1936, a net gain of $10,516,712.07. The total collection for the entire fiscal year ended June 30, 1936, was $68,485,731.27.

It is estimated that the collections for the three remaining months of the current fiscal year, April, May and June, will show the largest internal revenue collection for this fiscal year in the history of the Internal Revenue Office in Indiana and should exceed $80,000,000.

DEATHS

William L. McClain, M.D., retired physician of Scottsburg, died April tenth, after a long illness. Dr. McClain was sixty-eight years old. In his active years, Dr. McClain was a leader in civic affairs and had served as county and town health officer. He graduated from the University of Nashville, Medical Department, in 1898.

Millard F. Cupp, M.D., Clarksburg, died March twenty-second, aged seventy-eight years. Dr. Cupp graduated from the Medical College of Ohio, Cincinnati, in 1882, and was a member of the Decatur County Medical Society, the Indiana State Medical Association, and the American Medical Association.

Royal William Grubbs, M.D., Negro physician, of Gary, died March fourteenth, aged fifty-one years. Dr. Grubbs had been ill for several months. He graduated from the Meharry Medical College in Nashville, Tennessee, in 1916, and served in the U. S. Army during the World War. After his army service, Dr. Grubbs practiced in Paducah, Kentucky, for six years, then moved to Gary.

Charles A. Chumbley, M.D., died at his home in Oakland City, March fifteenth. He was sixty-nine years of age. Dr. Chumbley had been an invalid for eighteen years. He graduated from the Kentucky School of Medicine, Louisville, in 1902.

James B. Funk, M.D., of Fort Wayne, died March fourteenth, aged seventy-one years. Dr. Funk had practiced in Fort Wayne since 1912. He graduated from the Fort Wayne College of Medicine in 1884.

Charles C. Hickman, M.D., eye, ear, nose and throat specialist, of Logansport, died April fourth, aged sixty-four years. Dr. Hickman graduated from the Medical College of Indiana, Indianapolis, in 1902, and began his practice the same year at Yeoman, Indiana, where he remained until 1920 when he moved to Logansport. Dr. Hickman was a member of the Cass County Medical Society, the Indiana State Medical Association and the American Medical Association.

Arthur R. Mead, M.D., of Jeffersonville, died April eleventh, aged fifty years. Dr. Mead graduated from the University of Louisville School of Medicine in 1911, and had practiced in Jeffersonville for twenty-six years.

HOOSIER NOTES

Dr. Henry W. Greist, who was for many years stationed at Point Barrow, Alaska, with the Presbyterian Mission and Hospital, is now in Monticello, Indiana.

The sixty-first annual meeting of the American Association of Mental Deficiency will be held at Atlantic City, New Jersey, May 5 to 8, 1937, with headquarters at the Hotel Haddon Hall.

The Midwest Conference on Occupational Diseases will meet May 3, 4, and 5, at the Statler Hotel in Detroit, Michigan, and the American Association of Industrial Physicians and Surgeons will meet May 6 and 7, at the same place.

The American Heart Association will hold its thirteenth session June 7 and 8 at the Hotel Haddon Hall, Atlantic City, New Jersey.

Dr. Charles J. Brockway, of Brookston, and Dr. R. B. Wetherill, of Lafayette, returned March 16 from their journey which took them into three continents. The physicians left December 28, and their trip included visits in France, Egypt, Greece, Gilbraltar, Italy, and the Azores.

Dr. William Sigmund has established his office in Columbus, Indiana, where he will conduct a general practice. He has been practicing in Asheville, North Carolina, for several years. Dr. Sigmund is a native of Columbus.

Dr. and Mrs. Herman Baker, of Evansville, have announced the engagement of their daughter, Betty, to Dr. Dallas Fickas, who will practice in Evansville after completing postgraduate work at the University of Pennsylvania in June. The wedding will take place in July.

The large mess hall at the United States Veterans' Hospital at Marion, Indiana, was destroyed by fire March thirty-first. The loss was estimated at more than $300,000.

Dr. William H. Williams, of Lebanon, has remodeled his hospital building into an apartment building containing twelve four-room apartments. Dr. Williams established a hospital in the building in 1903. Since additional hospital facilities have been made available in Lebanon through an annex to the county hospital, Dr. Williams had the building remodeled, retaining office space for himself.

Dr. A. G. Tillotson, of Michigan City, fell at his home, March 31, and broke his hip. Dr. Tillotson, one of Indiana's oldest physicians, was 90 years old on April 15th.

Dr. Thomas D. Armstrong has moved from Rochester, Minnesota, to Michigan City, where he is associated with the Warren Clinic.

Dr. Lawrence Kelsey, of Kewanna, has opened his seventeen-room hospital which was recently completed. The building is two stories, and the exterior is cream-colored brick.

Dean W. D. Gatch, of the Indiana University School of Medicine, was a speaker at the centenary celebration of the Louisville Medical School, April second.

Dr. and Mrs. Herbert A. Ray, of Fort Wayne, will leave New York May 20 for a tour of the British Isles and France.

The tuberculin testing program of the Haddon township schools brought more than three hundred people to the meeting, April fifth, at the Carlisle High School. Dr. Albert M. Mitchell, of Terre Haute, was the principal speaker of the evening.

On April 2, Dr. James T. Gwathmey, of New York, and Dr. C. O. McCormick, of Indianapolis, gave a joint presentation of the subject "Obstetrical Analgesia" before the Dayton, Ohio, medical society.

Drs. I. M. Washburn and C. E. Johnson, of Rensselaer, Indiana, have announced plans to erect a modern clinic building in Rensselaer this summer, at a cost of $15,000. It is planned to have the clinic in operation by fall.

Dr. and Mrs. William C. Kunkler and children, of Terre Haute, have left for a three months' trip abroad. They sailed from New York April tenth, and expect to visit Italy, Germany, Russia, Switzerland, France, and England. Dr. Kunkler will do special work in Vienna.

Dr. Joseph E. Horton has moved from Columbus Grove, Ohio, to Earl Park, Indiana, where he has taken over the office and equipment of the late Dr. C. T. Bundy.

Dr. B. P. Gill has moved from Bloomington to Shoals where he will conduct a general medical and surgical practice.

Dr. Dwight Mackey has moved from Hobart to Winamac where he has established his office.

A three-day course in general dental nursing, the first of its kind in the United States, was held at the Indiana University school of dentistry, March 25, 26, and 27. The course was arranged by Dean Frederic R. Henshaw in cooperation with the Bureau of Maternal and Child Health of the Indiana State Board of Health.

Miss Marjorie Bell, of Indianapolis, and Marvin P. Cuthbert, son of Dr. and Mrs. F. S. Cuthbert, of Kokomo, were married April eighteenth in Indianapolis. Mr. Cuthbert is a senior medical student at the Indiana University School of Medicine.

Dr. E. L. Libbert, of Lawrenceburg, has purchased a property in Greendale where his office is now established. Since the flood, Dr. Libbert has conducted his practice from his home.

The Indiana Academy of Ophthalmology and Otolaryngology met in Indianapolis, April 14, at the Claypool Hotel. Speakers included Dr. John Green, of St. Louis, and Dr. J. M. Robb, of Detroit. Dr. W. F. Hughes, of Indianapolis, president, presided over the meetings.

Mrs. Isabelle Lamb Ferguson, wife of Dr. Charles E. Ferguson, of Indianapolis, died April thirteenth at her home in Indianapolis. Mrs. Ferguson was 81 years old.

Dr. H. B. Gable, of Monticello, is erecting a two-story brick and tile building, sixty by twenty feet, the lower floor of which will be used for his office. The second floor will be made into apartments or office rooms.

Dr. C. J. McIntyre, of Indianapolis, was elected president of the Indiana Tuberculosis Association at the twenty-sixth annual meeting held in Indianapolis, April fourteenth. Dr. M. R. Lohman, of Fort Wayne, was elected first vice-president; Woodson S. Carlisle, South Bend, second vice-president; Mrs. William Gremelspacher, Logansport, secretary (re-elected). Members of the executive committee are Paul West, Gary; Dr. Paul D. Crimm, Evansville; W. B. Hice, Terre Haute; Dr. M. H. Draper, Fort Wayne; Dr. Will J. Martin, Kokomo, and Dr. J. V. Pace, Rockville.

The secretary of the Hendricks County Medical Society advises that the society has a new vice-president, Miss Parker, the daughter of the society's president, Dr. Carl B. Parker. Miss Parker was born on Easter Sunday.

The annual meeting of the American Association for the Study of Goiter will be held in Detroit, Michigan, June 14, 15 and 16, with headquarters at the Book-Cadillac Hotel. Complete program may be obtained from the corresponding secretary, Dr. W. Blair Mosser, Kane, Pennsylvania.

The American Board of Ophthalmology will conduct examinations in Philadelphia, June 7, 1937, and in Chicago, October 9, 1937. Applications and case reports, in duplicate, must be filed at least sixty days before the date of examination. Secretary of the Board is Dr. John Green, 3720 Washington Boulevard, St. Louis, Missouri. The Board has decided to establish a preparatory group of prospective candidates for its certificate, the plan being to assist physicians who wish to study ophthalmology so that they may become acceptable as candidates for examination and certification when they have completed the requirements. Information concerning this may be obtained from the secretary.

The tenth annual graduate fortnight of the New York Academy of Medicine will be held November 1 to 12, 1937, and will be devoted to a consideration of medical and surgical disorders of the urinary tract. The subject will include Bright's disease, arterial hypertension, and infections, tumors, calculi and obstructions of the urinary tract, and will exclude venereal disease, diseases of the genitalia and gynecology. Complete program and registration blank may be secured from the executive secretary, Dr. Mahlon Ashford, 2 East 103rd Street, New York City.

The Indianapolis Ophthalmological and Otolaryngological Society and the Department of Otolaryngology of the Indiana University School of Medicine met at the Indianapolis Athletic Club, April eleventh, for a dinner meeting in honor of Dr. John F. Barnhill, who founded the anatomical and clinical course in otolaryngology while he was head of the Department of Otolaryngology of the Indiana University School of Medicine. Speakers at the dinner meeting included Dr. William Lowe Bryan, Bloomington; Dr. Joseph Beck, Chicago; Dr. H. A. VanOsdol, Indianapolis; Dr. Fred McK. Ruby, Union City; Dr. W. F. Hughes, Indianapolis; Dr. E. G. Boss, Indianapolis; Dr. W. D. Gatch, Indianapolis, and Mr. John Gaardsmoe, of Chicago.

The United States Department of Commerce makes an annual study of incomes. This year, their survey will include 10,000 physicians who will receive blanks to be filled in. If you receive one, fill it in carefully and accurately. Figures submitted will not be available to workers in the Internal Revenue Service, and there need be no hesitation on that ground.

A hold-up game rather extensively practiced in Chicago some months ago seems to have been imported into Indiana. Press dispatches carry the story of an attempt to hold up Dr. O. L. Baldridge, of Terre Haute, early in April. The hoodlums usually call the physician by telephone, or contact him personally, asking that a professional call be made. When Dr. Baldridge was accosted by two such young men, he sensed their purpose and refused to enter his car, whereupon he was struck with a black-jack, and the bandits fled without loot. The Chicago Medical Society has posted a reward in a sizable sum for the apprehension of such crooks.

The United States Civil Service Commission announces open competitive examinations for the positions of Associate Child Guidance Case Worker (salary $3,200 per year) and Assistant Child Guidance Case Worker (salary $2,600 per year) for the Children's Bureau of the Department of Labor. Applications must be on file with the U. S. Civil Service Commission at Washington, D. C., not later than May 10, 1937. Necessary forms may be obtained from the Secretary, Board of United States Civil Service Examiners, at any first-class post office, or from the United States Civil Service Commission, Washington, D. C.

The new laboratory and medical building of the Ball Memorial Hospital in Muncie was dedicated, April twenty-fourth, in honor of the memory of Edmund Burke Ball. The dedication program, conducted in the auditorium of the Ball State Teachers College, was addressed by Dr. Alexis Carrel, of the Rockefeller Institute for Medical Research.

EXAMINATION FOR JUNIOR OPTHALMOLOGIST

The Bureau of Personnel of the State of Indiana announces examination for Junior Opthalmologist (Examination No. 23), to establish an employment list for filling vacancies as they occur, in the Division of Unemployment Compensation of the Department of Public Welfare. Salary range will be $150 to $195 per month. Examination is open to any citizen of the United States who has been a resident of the State of Indiana for at least one year prior to date of filing application. Application blanks may be secured by writing to the Bureau of Personnel, State of Indiana, 141 South Meridian Street, Indianapolis, and must be filed on or before May 14, 1937. Place of examination will be announced later.

NATIONAL CONFERENCE OF SOCIAL WORK IN INDIANAPOLIS

The sixty-fourth annual meeting of the National Conference on Social Work will be held in Indianapolis, May 23 to 29. An attendance of from 8,000 to 10,000 is expected. The conference is open to all who wish to participate. Discussions of current public health problems will form the basis of many of the daily sessions.

A special committee on public health for the meeting has been established with Dr. Martha M. Eliot, assistant chief of the United States Children's Bureau, as chairman. Dr. Eliot's committee will emphasize the expanding program of medical care in federal departments. Speakers scheduled include R. C. Williams, medical director of the Rural Resettlement Administration; R. C. Hood, M. D., director of the crippled children's division of the U. S. Children's Bureau, and Josephine Brown, administrative assistant of the Works Progress Administration.

Other topics to be discussed include: planning for welfare of crippled children in relation to other services in the community; tuberculosis as a social problem; the control of syphilis; medical care of the aged; public welfare and health, a national program.

More than three hundred daily sessions are scheduled for the week of the meeting and the program will cover all phases of current social welfare. Four hundred speakers will participate.

Other organizations that will meet in Indianapolis at the same time include the American Association of Medical Social Workers, American Association on Mental Deficiency, American Association of Psychiatric Social Workers, American National Red Cross, International Society for Crippled Children, National Committee of Health Council Executives, National Council for the Physically Handicapped and National Tuberculosis Association.

SPECIAL TRAIN TO A. M. A. MEETING

The Pennsylvania Railroad will operate a special train from Indianapolis to Atlantic City, leaving Indianapolis at 1:54 p. m. on Sunday, June 6th, and arriving in Atlantic City at 10:00 a. m. on Monday, June 7th. Round trip fare from Indianapolis will be $44.85, and tickets will be good for return trip until October 31, 1937. For accommodations or other information, address E. R. Comer, Pennsylvania R. R., 108 E. Washington St., Indianapolis, or telephone Riley 9331.

In addition to the articles already enumerated in our letter of February 27, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories

Tablets Acetarsone—Abbott, 0.1 gm.

Tablets Acetarsone—Abbott, 0.05 gm.

Tablets Calcium Gluconate—Abbott (Flavored), 1 gm.

Campbell Products, Inc.
Novatropine
Novatropine Tablets 1/24 grain.
Eli Lilly & Co.
Tetanus Toxoid, Alum Precipitated (Lilly).
National Aniline & Chemical Co.
Aminopyrine—"National"
Aminopyrine Tablets, 5 grains.
National Drug Co.
Antipneumococcic Serum — Felton — Type II (Refined and Concentrated).
Sharp & Dohme, Inc.
Diphtheria Toxoid, Alum Precipitated, 1 cc. vial package.
Diphtheria Toxoid, Alum Precipitated, ten 1 cc. vials package.
Diphtheria Toxoid, Alum Precipitated, one 10 cc. vial package.
Tetanus Toxoid, Alum Precipitated, Refined.
Protamine Zinc Insulin
Protamine Zinc Insulin, 10 cc.
Winthrop Chemical Co., Inc.
Salyrgan Suppositories.

The following product has been accepted for inclusion in the List of Articles and Brands Accepted by the Council But Not Described in N. N. R. (New and Non-Official Remedies, 1936, p. 471):

National Aniline & Chemical Co., Inc.
Phenolsulfonphthalein.

INDIANA UNIVERSITY NEWS NOTES

Fifteen students of the Indiana University School of Medicine at Bloomington were initiated into Phi Chi, medical fraternity, Saturday, March 27, at the Indianapolis Athletic Club. Those initiated were: Robert Badertscher, Bloomington; Ray Burnikel, Evansville; Charles Chittick, Frankfort; Wendell Covalt, Muncie; Edwin Eaton, Indianapolis; Paul Eidson, Indianapolis; John Engle, Winchester; Robert Kabel, Winchester; Harold Laws, Milan; Max Long, Marion; Harry McClelland, Indianapolis; Tom Middleton, Ridgville; Dwain Mings, Kokomo; Charles Sage, Brownstown, and Dale York, Spencer.

The initiation was followed by an informal banquet and a formal dance, both of which were held at the Athletic Club. Alumni members from cities throughout the midwest attended the state meeting.

The following students of the Indiana University School of Medicine at Bloomington have been pledged to the Theta Kappa Psi, professional medical fraternity: Hayden Rahm, Indianapolis; Elmer Koch, Indianapolis; Bob Summers, Hammond, and Morris Strole, Terre Haute.

The annual postgraduate course in otolaryngology opened at the Indiana University Medical Center in Indianapolis April 11 and continued for two weeks. This course in diseases of the ear, nose and throat opened April 11 with a dinner at the Indianapolis Athletic Club given by the Indianapolis Ophthalmological and Otolaryngological Society and the department of otolaryngology of the Indiana University School of Medicine in honor of Dr. John F. Barnhill, former head of the department of Otolaryngology at the Indiana University School of Medicine, founder of the anatomical and clinical course of otolaryngology, charter and honorary member of the Indianapolis Ophthalmology and Otolaryngology Society and past president of the Indianapolis Medical Society.

Guest speaker at the dinner was John Gaardsmoe of the anatomical department of the Northwestern University School of Medicine, who spoke on "Demonstrations of Models and Drawings of the Air Cells of the Petrous Portion of the Temporal Bone." The address of welcome was given by President William Lowe Bryan, of Indiana University.

Other speakers were Dr. Joseph Beck, professor of the Illinois University School of Medicine, who is past president of the American Bronchoscopic Society; Dr. H. A. Van Osdol, president of the Indianapolis Ophthalmology and Otolaryngology Society; Dr. Fred McK. Ruby, chairman, section of Ophthalmology and Otolaryngology, Indiana State Medical Association; Dr. W. F. Hughes, president of the Indiana Academy of Ophthalmology and Otolaryngology; Dr. W. D. Gatch, dean of the Indiana University School of Medicine; Dr. Eugene G. Boss, representative of this year's class, Otolaryngologist, Springfield, Massachusetts. Dr. C. H. McCaskey, chairman of the Department of Otolaryngology, Indiana University School of Medicine, was toastmaster.

Sessions continued daily for two weeks. Case presentation and surgical procedures were given from eight to eleven o'clock each morning, and daily luncheons and dinners in the James Whitcomb Riley Hospital for Children were followed by round-table discussions.

The program included lectures and demonstrations in the pathology of the head and neck, bacteriology, immunology, plastic surgery of the head and neck, neoplasms of the head and neck, diseases of the middle ear, disorders of the cochlea and vestibular apparatus, acute and chronic mastoiditis, diagnosis and surgery in sinusitis, non-surgical treatment of the nasal sinuses, diseases of the tonsils and adenoids and bronchoscopy and esophagoscopy.

Co-related subjects presented include biological chemistry, the relation of ophthalmology or eye diseases to otolaryngology, neurotology, the x-ray in diagnosis, x-ray and radium therapy, and principles of surgery in otolaryngology. The course was limited to 40 members and registration was completed March 27. The registrants this year were distributed over 18 states.

SOCIETIES AND INSTITUTIONS

THE EXECUTIVE COMMITTEE

April 4, 1937.

Meeting called to order at 10:40 a. m.

Roll call showed the following present: C. A. Nafe, M.D., chairman; C. H. McCaskey, M.D.; E. D. Clark, M.D.; H. M. Baker, M.D.; M. A. Austin. M.D.; A. F. Weyerbacher, M.D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary.

Minutes of the meeting of February 14 corrected as suggested by Dr. Nafe and approved with the correction upon the motion of Dr. Clark, seconded by Dr. McCaskey.

Membership Report

Number of members on April 3, 1937	2,749
Number of members on April 3, 1936	2,536
Gain over last year	213
Number of members Dec. 31, 1936	2,835

This is the largest number of members that the Association has ever had this early in the year. This indicates that there will be a substantial increase in memberships by the end of the year.

1937 Meeting at French Lick

(1) Report made that Dr. C. G. Culbertson, chairman of the Scientific Exhibit Committee, and the executive secretary will make a trip to French Lick soon to study the situation in regard to the scientific exhibit.

(2) Floor plan and commercial exhibit announcements have been mailed to prospective exhibitors. Nineteen out of thirty-one spaces have been sold.

Graduate Education

Dates for meeting set for May 10 to May 14. Program in the April JOURNAL.

Secretaries' Conference

Attendance at the secretaries' conference on March 21 was 131.

The Executive Committee approved holding the next secretaries' conference jointly with the Northwest Conference at Chicago. This meeting will come some Sunday in January or February, 1938. This action of the Executive Committee is subject to the final decision of the Committee on Secretaries' Conference.

Legislative, Legal and Social Security Matters

Legislative Report. This report appears in the April JOURNAL. The committee instructed the executive secretary to send a letter of commendation to the members of the Legislative Committee thanking them for their fine services during the session just closed.

Resettlement Administration. The following motion was made by Dr. Austin, seconded by Dr. Baker, and carried:

"That all questions concerning bills for medical services rendered under any program that is drawn up with the Resettlement Administration be referred to a committee of the local county medical society composed of the president, secretary, and board of censors.

"If this committee cannot come to an agreement in regard to these bills with all parties concerned, the questions then will be referred to the Executive Committee of the Indiana State Medical Association."

This action was taken following a general discussion of a suggested program of arrangements for medical services to Resettlement Administration clients. The final determination of the matter in each case is left up to arrangements that might be made between the Resettlement Administration and the local county medical society.

Report made of the cult fight in Ohio and Illinois and the battle that Pennsylvania is having against a socialized medical bill.

Letter received from Dr. R. L. Hiatt suggesting changes in present statutes concerning the care of automobile accident cases and touching on other matters referred to Albert Stump for answer. Mr. Stump is to make a report upon this at the next meeting of the Executive Committee.

Medical Economics

Deduction for Charity Work from Physicians' Income Taxes. Correspondence with Dr. M. E. Leckrone, of Rochester, concerning deductions from physicians' income taxes for charity work brought to the attention of the committee. This entire matter had been taken up with the Bureau of Legal Medicine and Legislation of the American Medical Association which recommended that no action be taken in regard to this at the present time.

Division of Fees. Dr. E. D. Clark made a report upon the talk made on this subject at the Fountain-Warren County Medical Society meeting.

Letter from the Hord Sanitarium, Shelbyville. Indiana, which stated at the bottom, "We allow physicians $25.00 for expenses on each patient sent to us" brought to the attention of the committee. The Committee instructed the secretary to write a letter to Dr. Hord stating that the committee disapproved this.

Dr. Nafe made a report upon the survey that he is conducting in regard to the various state laws against division of fees.

Letter received from Frank Elliott, director of publicity, Indiana University, in regard to the psychological clinics conducted by Indiana University brought to the attention of the committee. This letter was in answer to a question that came up before the Executive Committee of the State Association at a previous meeting in regard to whether or not those who conduct these psychological clinics are engaged in the practice of medicine although they are not physicians. The Executive Committee had referred this matter to the Committee on Mental Health of the State Association and has as yet to receive a report from that committee in regard to this matter.

Attention of the committee called to the latest effort being made by Medical Economics, a "throw-away" publication, to obtain the right to use the names of prominent physicians as contributors to this journal.

Formation of "The Medical Guild" in Detroit brought to the attention of the committee.

Letter received from Dr. Burton D. Myers, dean of the Indiana University School of Medicine at Bloomington, thanking the Indiana State Medical Association for the distribution of Dr. Ochsner's book on Social Security. Dr. Austin reported that he had several of these volumes left and that he would be glad to send copies to officers of the Association desiring them.

Correspondence in regard to the annual study of physicians' incomes by the Department of Commerce brought to the attention of the committee. As this study had received the approval of the American Medical Association, the Executive Committee suggested that an article in regard to this, urging the physicians to cooperate, be printed in THE JOURNAL.

Correspondence in regard to the directory of the Underwriters' Bureau brought to the attention of the committee. This directory which purports to be a reference book for insurance companies and industrial organizations in selecting their medical representatives carries the names of physicians for $10.00 each. The Executive Committee wrote a number of insurance companies asking them how much use they make of this directory and found that these companies as a matter of fact very seldom, if ever, refer to the directory.

Situation of Physicians in Flooded Areas

Dr. Baker reported that the Red Cross has been and at the present time is making every effort to rehabilitate doctors to the extent of need. Information obtained from questionnaires sent out by the Executive Committee to the individual physicians in the flood district forms a basis for the work that is being done by the Red Cross.

The secretary was instructed to return the check for $10.00 received from George Crownhart, secretary of the Wisconsin State Medical Society, telling him that the work had been turned over to the American Red Cross and that if he desired, his contribution could be made direct to the Red Cross.

Reports Received from Various Counellors of the Flooded District. Report received that the State Division of Public Health had asked Washington for a grant to pay physicians for services rendered during the flood. The Executive Committee felt

that this is a problem that should be worked out by each local county medical society with the State Division of Public Health. A motion to this effect was made by Dr. Austin, seconded by Dr. Clark, and carried.

Syphilis and Cancer Control Campaigns

Letter of protest from Dr. H. C. Ragsdale, councilor, in regard to the cancer campaign brought to the attention of the committee. The committee felt that these campaigns should be carried on only through and with the cooperation of each local county medical society.

Honorary Membership

Question brought to the attention of the committee as to whether or not a physician who is an honorary member should receive the benefits of malpractice defense. On December 3, 1933, the minutes of the Executive Committee read as follows in regard to a discussion upon this point:

"Are honorary members entitled to malpractice defense? Opinion of Albert Stump is that honorary members are not entitled to malpractice defense. 'If there is no change made in the by-laws to meet this classification of honorary members, I do not believe that the honorary member would be entitled to medical defense. Section 7, of Chapter 12 of the by-laws makes the payment of dues a condition upon which the right to defense depends.' "

The attorney for the Association said, however, that the by-laws could be interpreted several ways, and upon the motion of Dr. Austin, seconded by Dr. McCaskey, the by-laws were interpreted to allow medical defense protection to honorary members in consideration of the fact that they had contributed to the medical defense fund over a period of years.

Viavi Company

Correspondence in regard to the activities of the Viavi Company brought to the attention of the Executive Committee. This matter has been taken up with both the Better Business Bureau and the State Board of Medical Registration and Examination.

The Journal

The committee authorized the purchase of a new bookcase for the library.

Letter received from the library of the Los Angeles County Medical Association thanking THE JOURNAL for the exchange arrangement that has been made with the California State Medical Association.

A letter to be sent to hospitals in regard to subscribing to THE JOURNAL for interns was approved by the committee.

THE BUREAU OF PUBLICITY

January 19, 1937.

Present: William N. Wishard, M.D., chairman; F. M. Gastineau, M.D.; E. V. Hahn, M.D., and T. A. Hendricks, executive secretary.

The release, "Social Hygiene Day," approved for publication in February 3 papers.

Requests for speakers:

Jan. 20—Parke-Vermillion County Medical Society, Clinton, Indiana. Speaker obtained.

Jan. 28—Cass County Medical Society, Logansport, Indiana.

Feb.—Dubois County Medical Society, Huntingburg, Indiana.

A report by one member of the Bureau in regard to the historical copy of the By-Laws of the Henry County Medical Society is to be brought to the attention of the Bureau at a subsequent meeting.

The following letter was received from J. D. Adams, chairman of the State Highway Commission of Indiana, in answer to the communication of the Bureau concerning highway markers for medical purposes:

"Your communication of January 6 relative to the erection of markers to commemorate the names of medical pioneers has come to my attention.

"I am passing your letter on to different ones in the department for their consideration.

"The cases you mention are indeed interesting and indicate that we had some fearsome individuals here in Indiana long years ago."

Letter received from a life insurance company acknowledging the letter of the Bureau concerning the pneumonia campaign.

March 30, 1937.

Present: William N. Wishard, M.D., chairman; F. M. Gastineau, M.D.; E. V. Hahn, M.D., and T. A. Hendricks, executive secretary.

The release, "Cancer Campaign This Week," published the week of March 21, approved.

The release, "Hospital Overcrowding and Overbuilding," approved for publication in Saturday papers, April 10. Several changes in this release were suggested before approval.

Requests for speakers:

April 13—Knox County Medical Society, Vincennes. Speaker obtained to talk on "The Importance of Pelvic Examination."

April 14—Parent-Teacher Association of School No. 76, Indianapolis. Speaker obtained.

Reports on meetings:

Jan. 12—Hancock Federation of Women's Clubs, Greenfield, Ind. "Venereal Disease." (75 to 100 present.)

Feb. 1—Woman's Auxiliary to the Vigo County Medical Society, Terre Haute, Ind. "Some Remarks Concerning Heart Disease." (40 to 50 present.)

Feb. 17—Parke-Vermillion County Medical Society, Clinton, Ind. "Practical Management in Skin Diseases and Syphilis." (16 present.)

Material in regard to Child Health Week, May 1, brought to the attention of the Bureau. The Bureau approved the preparation of a release in regard to child health.

Material in regard to National Hospital Day, May 12, brought to the attention of the Bureau. The Bureau approved a release on that day.

Copy of the *Hoosier Health Herald*, publication of the Indiana Tuberculosis Association, brought to the attention of the Bureau as it contained in its editorial columns the article prepared by the Bureau of Publicity entitled, "What the Public May Expect from the Medical Profession." The *Herald* gave credit for this article to the Bureau of Publicity.

Newspaper clippings from an Indiana community in regard to the use of physicians' names in connection with the treatment of cases brought to the attention of the Bureau. The Bureau assigned these clippings and the material to one of its members for study and a report at a subsequent meeting of the Bureau.

The following letter from the Bureau, written by its secretary, to the American Social Hygiene Association, was brought to the attention of the Bureau along with the answer from the American Social Hygiene Association:

"For some time we have been receiving your *Social Hygiene News* and have found it very interesting. However, in this present issue, and I believe in most of the issues that have come to my notice, there has been a very painful lack of any recognition given to the doctors. You list all agencies and all cooperating groups and yet you fail dismally in your January issue in not listing any medical groups which are cooperating.

"The whole-soul cooperation of the medical profession is absolutely necessary for the social hygiene program to succeed or fail and I would regret to see your organization assume the attitude that so many lay organizations have assumed in the past of giving absolutely no recognition to the doctors, to the American Medical Association, and to the various component state and county medical societies."

The answer of the American Social Hygiene Association follows:

"We agree so heartily with what you say in your letter of February 5th regarding the necessity of cooperation from the medical profession that I am a little surprised that our Association should be taken to task for an opposite attitude.

"It is true that the January *Social Hygiene News* does not mention particularly the cooperation of physicians, but if you will examine this number, you will see it was intended to be a rapid and brief review of the public information aspects of the social hygiene program rather than a general discussion of complete social hygiene activities for the year. Such a discussion would naturally include as a major item the splendid and hearty cooperation rendered by the medical profession in the campaign against syphilis. The Association's Annual Meeting program, however, published in this same number of the *News*, it seems to us indicates more clearly perhaps than any other kind of reference would, the

way in which we rely upon and seek at all times to cooperate with the medical profession, including the American Medical Association as well as the State and County Societies. Of the nine speakers listed, eight were physicians and we were honored on this occasion by the attendance and participation of numerous representatives of the medical profession among our several hundred guests.

"The December number of the *News*, you will perhaps note, mentions particularly the cooperation of the medical profession and suggests that local groups should look to qualified physicians to speak on their programs and cooperate in other ways. You will probably recall also that we especially sought the advice of the medical associations when undertaking to plan for the nation-wide series of meetings held on February 3rd. I wonder if you have seen the November *Journal of Social Hygiene* which was designed particularly for the discussion of medical and public health activities? A copy is enclosed."

A letter also was received from the American Social Hygiene Association thanking the Bureau of Publicity for its help and cooperation in giving publicity to the First National Social Hygiene Day.

A report by a member of the Bureau in regard to the Henry County Medical Society constitution of 1858 was brought to the attention of the Bureau. This was to be taken up at the next meeting of the Bureau.

April 6, 1937.

Present: William N. Wishard, M.D., chairman; E. V. Hahn, M.D., and T. A. Hendricks, executive secretary.

The release, "Spring Exercise," approved for publication in April 17 papers.

Report on medical meeting:

March 19—Kiwanis Club, Tipton. "Diagnosing the Doctors." (40 present.)

Report of a member of the Bureau in regard to the Henry County Medical Society constitution and by-laws of 1858 made to the Bureau. The Bureau approved the review and recommended that it be sent to THE JOURNAL to be published as coming from the Bureau of Publicity.

Letter received from the state chairman of the summer round-up sponsored by the Indiana Congress of Parents and Teachers brought to the attention of the Bureau. Recommendation made that this matter be taken up with the director of the Maternal and Child Welfare Division of the Indiana State Division of Public Health.

Report made by a member of the Bureau in regard to newspaper clippings received from an Indiana community concerning the use of physicians' names in connection with the treatment of cases. The Bureau instructed the secretary to write to the physician who sent in the clippings that the Bureau is a publicity committee and not a judicial body and it is customary to take such matters up with one's local county medical society. The Bureau further expressed the opinion that if the physician making the complaint is not satisfied with the decision of his own local council, he has the right to appeal the matter to the Council of the Indiana State Medical Association.

Letter received by the Bureau asking whether or not there are any restrictions in the use of neon or similar signs by physicians. The Bureau would not approve the use of a neon or similar sign because signs of that type would not be in good taste.

Notice of the annual meeting of the Indiana Tuberculosis Association to be held April 13 and 14 at Indianapolis brought to the attention of the Bureau. The attention of the Bureau also was called to the Tuberculosis Abstracts for March and April, 1937, issued monthly by the National Tuberculosis Association.

The Rhode Island Medical Society recently has appointed a publicity committee, the chairman of which asked for a report upon the work of the Bureau of Publicity of the Indiana State Medical Association. The Bureau complied with the request and on March 7 received the following answer from the Rhode Island physician requesting the information:

"Thank you very much for the information regarding the Bureau of Publicity of the Indiana State Medical Association which you so kindly sent me last month. I was quite impressed with the way this work has developed in your state. I only hope that we may do something equally worthwhile eventually. I would appreciate being on any of your mailing lists which you might think suitable in order that we may keep in closer touch with what you are doing, and hope to profit thereby. If we can ever be of any similar service, please feel free to call upon us."

Article entitled, "Parents, What About Basketball?" by the director of health education of the Indiana State Division of Public Health in the April issue of the *Indiana Parent-Teacher* brought to the attention of and approved by the Bureau of Publicity.

TENTH DISTRICT SOCIETY

The Tenth District Medical Society held its annual meeting at the Spa, near Gary, April eighth. Officers were elected as follows:

President: Dr. G. R. Douglas, Valparaiso.

Vice-president: Dr. C. H. DeWitt, Valparaiso.

Secretary-treasurer: Dr. C. M. Davis, Valparaiso.

The 1938 spring meeting will be held in Valparaiso during April.

One hundred physicians from Lake, Porter and LaPorte counties attended the meeting. Speakers included Dr. William S. Sadler, psychiatrist, of Chicago, who spoke on "Mental Hygiene"; Dr. Charles B. Peustow, of Chicago, who spoke on "Post-Operative Care," and Dr. Archibald L. Hayne, chairman of pediatrics at the Cook County Hospital, whose subject was "Newer Therapy of Infectious Diseases."

COUNTY SOCIETY REPORTS

CARROLL COUNTY MEDICAL SOCIETY met at Delphi, April eighth, to hear Dr. G. B. Jackson, of Indianapolis, talk on "Forceps Delivery" and to see motion pictures by Dr. Joseph B. DeLee.

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CASS COUNTY MEDICAL SOCIETY members met at Logansport, April fifth, to hear Dr. J. T. Waldo, Indianapolis dentist, discuss "Mouth Infections." This was a joint meeting with members of the dental society.

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CLAY COUNTY MEDICAL SOCIETY met at the Clay County Hospital in Brazil, April first, for annual election of officers. For 1937, the officers are:

President, Dr. H. H. Ward, Coalmont.

Vice-president, Dr. L. C. Rentschler, Clay City.

Secretary-treasurer, Dr. John C. Shattuck, Brazil.

The physicians voted to have evening office hours on Monday, Wednesday and Saturday only. Heretofore, members have kept their offices open every week-day evening.

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CLINTON COUNTY MEDICAL SOCIETY held a meeting at Frankfort, April first. Mr. Albert Stump, attorney for the Indiana State Medical Association, was the principal speaker, his subject being "The Professional Person in the Community." Attendance numbered twenty-nine, including nurses, attorneys and dentists who were invited to attend.

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DAVIESS-MARTIN COUNTY MEDICAL SOCIETY held its regular monthly meeting March thirtieth, at the Daviess county hospital. Twelve members attended. The program consisted of case reports.

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DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY members held their regular meeting at the Hotel Roberts in Muncie, March sixteenth. New methods of treating blood infections were discussed.

DUBOIS COUNTY MEDICAL SOCIETY met in Huntingburg, March twenty-third. Dr. Harold Lynch, of Evansville, talked on "Communicable Diseases of Children" and Dr. John W. Ferree, of the Indiana State Board of Health, discussed local health administration. Twelve members were present.

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FLOYD COUNTY MEDICAL SOCIETY met at the Woolworth Cafeteria in New Albany, April ninth, for a dinner meeting. Dr. G. Irene Polhemus, of New Albany, presented a paper on "Allergy." Attendance numbered sixteen.

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FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY met in the Chamber of Commerce Building, April sixth, when Dr. Ward F. Seeley, of Detroit, Michigan, discussed "Heart Disease and Pregnancy from the Viewpoint of the Obstetrician." This was a dinner meeting, and the program was the annual lecture on obstetrics. Attendance numbered fifty-six.

Members of the society were guests of the General Electric Company at a dinner meeting, March twenty-third. Short talks were made by the plant manager and industrial relations department chief. A tour of the building concluded the program which was in charge of Dr. Harry Garton, General Electric Company physician.

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FORT WAYNE ACADEMY OF MEDICINE held a meeting at the Fort Wayne Chamber of Commerce, April twelfth. Dr. Lawrence Shinabery gave an illustrated talk on "Injection Treatment of Hernia." Discussants were Drs. Doster Buckner and Arthur E. Moravec. The academy will elect officers May eleventh.

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FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY members met at Kingman, April first, to hear Dr. Edmund D. Clark, of Indianapolis, president of the Indiana State Medical Association, talk on "Art and Science of Surgery." Attendance numbered forty-two.

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FULTON COUNTY MEDICAL SOCIETY held a meeting at Rochester, April second. Dr. A. J. Micheli presented a paper on "Postpartum Hemorrhage and Prevention and Treatment of Eclampsia," and Dr. DeLee's motion picture films were shown. Twenty-two physicians and nurses were present.

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GIBSON COUNTY MEDICAL SOCIETY members met at the Hotel Emerson in Princeton, April twelfth, when Dr. Karl Ruddell, of Indianapolis, was the principal speaker.

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GREENE COUNTY MEDICAL SOCIETY met at Linton, March twelfth, in the Freeman-Greene County Hospital. Dr. Paul Merrell, of Indianapolis, presented a paper on "Surgery of Tuberculosis of the Chest."

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HAMILTON COUNTY MEDICAL SOCIETY met March ninth at Carmel in the office of Dr. C. M. Donahue. The speaker was Dr. John Dalton, of Indianapolis, who presented an illustrated lecture on the early symptoms and the treatment of syphilis.

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HENDRICKS COUNTY MEDICAL SOCIETY met at D nville, March eighteenth, with Drs. Robert Wiseheart, of North Salem, and W. J. Fuson, of Coatesville, as speakers.

* * *

HENRY COUNTY MEDICAL SOCIETY held its meeting in Newcastle, March eighteenth, with twenty-two members and guests present. Dr. G. W. Gustafson, of Indianapolis, presented a paper on "Obstetrics." Dr. Clyde G. Culbertson, of Indianapolis, spoke on "Newer Laboratory Methods."

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HOWARD COUNTY MEDICAL SOCIETY members met at Kokomo April second for a dinner meeting. Dr. G. G. Eckhart, of Marion, presented the principal address.

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INDIANAPOLIS (MARION COUNTY) MEDICAL SOCIETY held its regular meeting at the Hotel Antlers, March twenty-third. Dr. Charles P. Emerson presented a paper on "The Emotional Element in the Etiology, Course and Prognosis of Disease," which was discussed by Drs. Karl R. Ruddell and Larue Carter.

At the March thirtieth meeting, four papers on ophthalmological and otolaryngological subjects were presented by Drs. Harry A. VanOsdol, C. W. Rutherford, Kenneth L. Craft, and Bert E. Ellis. Discussants were Drs. John M. Cunningham and Lyman T. Meiks.

Dr. Harold F. Dunlap and Dr. William E. King read papers at the April sixth meeting of the Indianapolis Medical Society. Their subjects were "States Associated with Lowered Basal Metabolic Rates," and "The Senile Heart." Discussants were Dr. J. O. Ritchey and Dr. C. J. Clark.

Dr. S. J. Miller, director of student health service at Purdue University, and Dr. Albert Friedlander, of the University of Cincinnati, were guest speakers at the April thirteenth meeting of the Indianapolis Medical Society. This was a joint meeting of the society with the Indiana State Tuberculosis Association and was held in the Hotel Lincoln. Dr. Miller's subject was "The Tuberculosis Problem in Universities," and Dr. Friedlander talked on "Modern Methods in the Diagnosis of Pulmonary Tuberculosis."

* * *

JASPER-NEWTON COUNTY MEDICAL SOCIETY met at Rensselaer, March twenty-fifth, to hear Dr. J. H. Hawk, of Indianapolis, talk on "Prenatal Care and Conduct of Normal Labor." Thirteen members and two guests were present.

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JAY COUNTY MEDICAL SOCIETY met at Portland, April second, with Dr. Fred Maurer as principal speaker. His subject was "Diagnosis and Treatment of Heart Disease." Attendance numbered eighteen.

* * *

JEFFERSON COUNTY MEDICAL SOCIETY met at Madison, at the Hillside Hotel, March twenty-ninth, for a dinner meeting. Dr. John F. Kelly, of Indianapolis, was the principal speaker. The program was sponsored by the Bureau of Maternal and Child Health of the Indiana State Board of Health. Moving picture films on obstetrics were shown.

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KNOX COUNTY MEDICAL SOCIETY held a meeting at the Jewel Cafe in Vincennes, April thirteenth. Dr. Ross C. Ottinger, of Indianapolis, talked on "The Importance of Pelvic Examinations." Attendance numbered sixteen.

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KOSCIUSKO COUNTY MEDICAL SOCIETY members and dentists of the county held a joint meeting in Warsaw, April seventh, at the Hotel Hays. Dr. John W. Graves, of Indianapolis, presented a paper on "Inter-relations of the Medical and Dental Professions." Attendance numbered forty-four.

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LAFAYETTE ACADEMY OF MEDICINE held its regular meeting March twenty-third, with Dr. Robert L. Glass, of Indianapolis, as principal speaker. Subjects presented were "Surgical Treatment of Hypertension" and "Head Injuries."

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LAKE COUNTY MEDICAL SOCIETY held its March meeting at Mercy Hospital in Gary, March tenth. Dr. Dean Lewis, of Johns Hopkins University, was the principal speaker. The Sisters at Mercy Hospital served the dinner.

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LAPORTE COUNTY MEDICAL SOCIETY met for its regular meeting at the Spaulding Hotel, Michigan City, March eighteenth. Dr. John W. Ferree, of the Indiana State Board of Health, talked on "Full Time Local Health Department." Attendance numbered fifteen.

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LAWRENCE COUNTY MEDICAL SOCIETY held a meeting in Bedford, April seventh. Dr. R. E. Wynne presented a paper on "Treatment of Pneumonia."

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MORGAN COUNTY MEDICAL SOCIETY held its regular monthly meeting at the Morgan County Memorial Hospital, March seventeenth. Dr. O. I. Benash, of Chicago, presented a paper on "Oxygen Administration." Slides and moving pictures of methods of oxygen administration were shown. Attendance numbered fifteen.

MUNCIE ACADEMY OF MEDICINE held a meeting at the Hotel Roberts, April thirteenth, when Dr. Louis J. Karnosh, of Cleveland, presented a paper on "Case Studies of Hemi-Cerebrectomy and Frontal Lobe Resection."

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NORTHERN TRI-STATE MEDICAL ASSOCIATION held its annual meeting in Jackson, Michigan, April thirteenth. Dr. J. N. Kelly, of LaPorte, is treasurer of the association and Dr. L. T. Rawles, of Fort Wayne, is a counsellor. Numerous speakers included Dr. Henry O. Mertz, of Indianapolis, whose subject was "Urinary Tract Symptoms as They Influence Differential Diagnosis of Abdominal Diseases."

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NORTHEASTERN INDIANA ACADEMY OF MEDICINE members held their meeting in Kendallville, March twenty-fifth.

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PARKE-VERMILLION COUNTY MEDICAL SOCIETY members met at the Vermillion County Hospital in Clinton, March seventeenth, with Dr. A. H. Lee, of Terre Haute, as principal speaker. His subject was "Physiology and Conduct of Normal Labor." Moving pictures on the subject were shown. Attendance numbered twenty-three.

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PORTER COUNTY MEDICAL SOCIETY members met at Valparaiso, March thirtieth. Drs. Lester Garrison and Monroe Garrison, of Chicago, presented papers on "Surgical Abdomen of a Child, and Treatment," and "Report of Twelve Cases of Sacro-Iliac Fusion." A moving picture film on "Poliomyelitis" was shown. Attendance numbered fourteen.

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RANDOLPH COUNTY MEDICAL SOCIETY held a meeting at the Randolph County Hospital in Winchester, March eighth. A moving picture of "Forceps Delivery" and other educational films were shown. Attendance numbered ten.

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RANDOLPH COUNTY MEDICAL SOCIETY held a meeting in Winchester, April twelfth, when Dr. I. E. Brenner, of Winchester, talked about Hodgkin's Disease.

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RUSH COUNTY MEDICAL SOCIETY members met at Rushville, March sixteenth, to hear Drs. Homer H. Wheeler and Ernest Rupel, of Indianapolis, discuss 'Cancer of the Rectum and Prostate." Attendance numbered eight.

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ST. JOSEPH COUNTY MEDICAL SOCIETY met at the Jefferson Plaza, South Bend, March thirtieth. Dr. Paul E. Haley, of South Bend, discussed "Anatomy and Physiology of the Peritoneum as Applied to General Practice." Attendance numbered thirty-four. An unique model of peritoneum was exhibited.

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ST. JOSEPH COUNTY MEDICAL SOCIETY met in the Jefferson Plaza, South Bend, March ninth. Dr. Morris Balla was the principal speaker, his subject being "Hemiplegia." Twenty-eight members were present.

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SULLIVAN COUNTY MEDICAL SOCIETY met at the Mary Sherman Hospital, April seventh, at Sullivan. Dr. J. H. Warvel, of Indianapolis, presented a paper on diabetes with particular reference to the use of protamine-insulin. Attendance numbered twenty-four,

TIPPECANOE COUNTY MEDICAL SOCIETY met at Lincoln Lodge, April thirteenth, to hear Dr. Archibald L. Hoyne, of Chicago, discuss "Diagnosis and Prevention of Contagious Diseases." Dr. Hoyne conducted a clinic at St. Elizabeth Hospital in the afternoon and his address followed the dinner meeting in the evening.

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TIPTON COUNTY MEDICAL SOCIETY members met at Tipton, March nineteenth. Dr. John R. Swan, of Indianapolis, presented a paper on "Anatomy and Diseases of the Ear."

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VANDERBURGH COUNTY MEDICAL SOCIETY met at Evansville, April thirteenth, at the Evansville State Hospital with Dr. John H. Hare, superintendent of the hospital, as host. Dr. W. W. Eichelberger talked on "The Neurotic Patient," and Dr. Harold Nisenbaum read a paper on "The Use of Insulin in Dementia Præcox."

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VIGO COUNTY MEDICAL SOCIETY met at St. Anthony's Hospital in Terre Haute, February ninth. Dr. J. R. Yung, of Terre Haute, presented a case of lymphosarcoma of the ascending colon, and Dr. William C. Kunkler presented a case of fracture of the cervical vertebræ. A committee report on the care of flood refugees from Evansville was presented. Attendance numbered thirty-four.

At the March ninth meeting, held in the Union Hospital, Terre Haute, Dr. B. D. Myers, of Bloomington, talked on "The Autonomic Nervous System—Some Newer Conceptions." This was a joint meeting with the Fifth District Medical Society.

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WABASH COUNTY MEDICAL SOCIETY met at the Sheller Hotel in North Machester, April seventh. Dr. M. S. Davis, of Marion, was principal speaker, his subject being "Fractures of the Ankle." Attendance numbered twelve.

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WHITLEY COUNTY MEDICAL SOCIETY members met at Columbia City, April thirteenth. Dr. George McDowell, of Fort Wayne, discussed "Obstetrics in the Home." Attendance numbered ten.

PITUITARY HORMONES — WITHERSPOON

(Continued from page 241)

at the end of the cycle and only in rare instances will the injection of this hormone result in true menstruation. But we have been told, as time goes on, how this hormone may be utilized in the treatment of other conditions.

As to organotherapy, gratifying results may usually be expected in the treatment of the vasomotor disturbances of the menopause, gonorrheal vulvovaginitis of childhood, and adenosis of the breast with the estrogenic hormone. Cryptorchidism usually responds to injections of the anterior pituitary-like hormone if the testicle is not held in place by adhesions. Many workers have obtained good results in functional uterine bleeding by the use of the anterior pituitary-like hormone.

BOOKS

BOOKS RECEIVED

WHY WE DO IT. An Elementary Discussion of Human Conduct and Related Physiology. By Edward C. Mason, M.D., Ph.D., professor of physiology, University of Oklahoma School of Medicine, Oklahoma City. 177 pages. Cloth. Price $1.50. C. V. Mosby Co., St. Louis, 1937.

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A MEDICAL FORMULARY. By E. Quin Thornton, M.D., Emeritus Professor of Therapeutics in the Jefferson Medical College, Philadelphia. Fourteenth edition, thoroughly revised. 363 pages, flexible binding. Price $2.75. Lea and Febiger, Philadelphia, 1937.

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MEMORANDA OF TOXICOLOGY. By Max Trumper, B.X., A.M., Ph.D., Consulting Clinical Chemist and Toxicologist; former lecturer on toxicology, Jefferson Medical College, Philadelphia. Third edition. 304 pages, with flexible, washable binding. Price $2.00. P. Blakiston's Son and Co., Inc., Philadelphia, 1937.

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HANDBOOK OF ORTHOPAEDIC SURGERY. By Alfred Rives Shands, Jr., B.A., M.D., Associate professor of surgery in charge of orthopaedic surgery, Duke University School of Medicine, etc. In collaboration with Richard Beverly Raney, B.A., M.D., instructor in orthopaedic surgery, Duke University School of Medicine. 593 pages with 169 illustrations. Cloth. Price $5.00. The C. V. Mosby Company, St. Louis, 1937.

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PROCEEDINGS OF CONFERENCE ON VENEREAL DISEASE CONTROL WORK. Washington, D. C., December 28-30, 1936. U. S. Treasury Department, Public Health Service. Supplement No. 3. 154 pages. Paper cover. For sale by Superintendent of Documents, Washington, D. C. Price fifteen cents.

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SURGICAL PATHOLOGY OF THE THYROID GLAND. By Arthur E. Hertzler, M.D., surgeon to the Agnes Hertzler Memorial Hospital, Halstead, Kansas, Professor of Surgery, University of Kansas. 298 pages with 238 illustrations. Cloth. J. B. Lippincott Company, Philadelphia, Montreal and London, 1936.

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THE THYROID AND ITS DISEASES. By J. H. Means, M.D., Jackson Professor of Clinical Medicine, Harvard University, and chief of the medical services, Massachusetts General Hospital. Many collaborators. 601 pages, illustrated. Cloth. J. B. Lippincott Company, Philadelphia, Montreal, London, 1937.

MEDICAL UROLOGY. By Irvin S. Koll, B.S., M.D., F.A.C.S., Attending Urologist, Michael Reese Hospital. 431 pages, illustrated. Cloth. Price $5.00. C. V. Mosby Company, St. Louis, 1937.

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CATARACT. ITS PREVENTIVE AND MEDICAL TREATMENT. FOR SPECIALISTS, GENERAL PRACTITIONERS AND STUDENTS. By A. Edward Davis, A.M., M.D., formerly professor of ophthalmology, New York Post-Graduate Medical School and Hospital (Columbia University). 161 pages. Cloth. Price $3.00. F. A. Davis Company, Philadelphia, 1937.

* * *

SYNOPSIS OF PEDIATRICS. By John Zahorsky, A.B., M.D., professor of pediatrics and director of the department of pediatrics, St. Louis University School of Medicine. Assisted by T. S. Zahorsky, B.S., M.D., instructor in pediatrics, St. Louis University School of Medicine and assistant pediatrician to the St. Mary's group of hospitals. Second edition. 367 pages with 80 illustrations. Imitation leather binding. Price $4.00. The C. V. Mosby Company, St. Louis, 1937.

ABSTRACTS

VALUE OF FEVER THERAPY FOR GONORRHEA

C. A. Owens, Omaha (*Journal A.M.A.*, December 12, 1936), presents the results obtained by treating 100 patients having gonococcic infection by artificial fever. Fever therapy offers immediate symptomatic relief and cure in such a great majority of cases that the patient may actually be promised such relief when formerly no prognosis could be given. Of seventeen (some patients appear under more than one heading) cases of acute urethritis of less than two weeks' duration with copious discharge containing typical organisms, nine were cured with an average of three treatments of 5.6 hours each. Of the unsatisfactory cases, there was refusal in four to continue after the first or second session and four others took seven, five, six and nine treatments each without visible improvement. In sixty-one cases of chronic urethritis with prostatic involvement in which there was a discharge containing typical organisms, urine containing shreds and prostatic secretion containing leukocytes and organisms, thirty-five obtained a cure with an average of 4.3 treatments of 5.8 hours each. Twenty-one patients were improved with an average of 2.9 treatments of 5.3 hours each. Of the four unimproved patients one was senile and treatment was stopped because of cardiac weakness, two others reacted badly, and one stopped after the third treatment. Results were consistently good when adequate treatment was taken. Six of ten cases of salpingitis were cured. The average number of treatments was 5.2 hours each. All those not cured discontinued treatment on their own accord when they were relieved of subjective symptoms. Fourteen of twenty-two cases of gonococcic arthritis were cured through an average of 4.8 treatments of 4.6 hours each. The other eight patients were improved. All of the twenty-four cases of acute epididymitis were relieved of pain immediately. In thirteen cases, associated processes such as urethritis and prostatitis were cured. In

eleven cases, in addition to the immediate subsidence of pain and swelling, urethral and prostatic symptoms were relieved also, but of these patients eight discontinued treatment immediately on getting relief regardless of the prospect of cure by further treatment. The thirteen patients had an average of 4.8 treatments of 5.5 hours each. One case of recurrent acute iritis with chronic prostatitis was improved miraculously after the first session of six hours in the cabinet. The patient was entirely free from pain after the second session, and no signs remained after the fourth treatment of either iritis or prostatis. A boy aged 14 years, with acute urethritis with gonorrheal ophthalmia experienced marked improvement after the first treatment and all signs in the eye and in the urethra had disappeared after the third treatment. Four treatments of six hours each were given. Given patients who can and will take the treatment, better than 80 per cent of gonococcic infections regardless of complications may be absolutely cured in the space of two weeks.

THE PHYSICIAN'S PLACE IN THE HEALTH PROGRAM

W. W. BAUER, Chicago (*Journal A. M. A.*, Aug. 15, 1936,) shows that the place of the physician in a community health program must be a central one. Public health relies in the last analysis on medical science. It is true other sciences are called on and that nurses, statisticians, educators, administrators and engineers make their contributions to a program of public health, but without the correlation furnished by medicine, progress toward better health would not ensue. A successful program toward better health demands idealism, but it must also be a practical movement. The feet of the workers must be firmly planted on solid ground. The experience of the physician with the complexities of the human organism and the endless complications involved in its relationship to the environmental cause him to develop a spirit of conservatism and caution. The conservatism of the profession makes it an easy mark for lampoons by the thoughtless or the unscrupulous, but this very conservatism can be a valuable balance wheel which will help to keep the practices of public health within the bounds of scientific accuracy. Idealism and practical experience require opportunity for expression. No one in the community has a greater opportunity than has the physician. The medical profession as a whole has always accepted its obligations toward the public in a spirit of idealism tempered by experience. Public health, in common with all other branches of medicine, rests on research. Without research, there is no progress. The medical profession, individually and collectively, has always been in the forefront of research. The existence of the Scientific Assembly and the Scientific Exhibit of the American Medical Association are in themselves powerful stimuli to research. *The Journal of the American Medical Association* and the eight special journals offer opportunity for the publication of significant contributions. The Association itself makes grants in support of research. Significant contributions to research are made by representative members and Fellows of the Association and their allied workers through research laboratories in medical schools, governmental establishments and other institutions. Organized medicine has not only encouraged and participated in research, but has defended it against the villainous attacks of the antivivisectionists, who deck themselves in furs and and feathers while they shudder at the thought of stimulating the muscle of a dead frog with an electric current. Legislation intended to cripple medical research has been fought in the Congress of the United States and in the several state legislatures by research workers and medical societies. The influence of organized medicine has consistently been exerted in defense of an apathetic public which has not yet realized how its security is threatened by a small, noisy group of fanatics. The physician knows community health needs in a peculiarly intimate manner possible only to physicians and the clergy. The physician must have a central place in the public health program because he commands public confidence. Another field in which the physician can make great contributions, has made them and continues to make them, is health education. Since the very beginning of medical practice, it has been the habit of physicians to advise their patients not only about treatment, but about prevention. This has been a person-to-person relationship, and this relationship will continue to be necessary in our attacks on the great health problems of today; namely, cancer, apoplexy, kidney disease, syphilis, diabetes, heart disease and the evils of self diagnosis, self medication and the nostrum racket. The fight against quackery has been prosecuted with more vigor and success by the medical profession than any other agency. The picture painted is not a completed canvas. Not every physician measures up to the ideals that have here been pictured, but the profession, as a whole, may fairly be said to have done so.

CLINICAL PROBLEMS IN SYPHILIS CONTROL TODAY

John H. Stokes, Philadelphia (*Journal A.M.A.*, March 6, 1937), brings out the fact that the League of Nations investigation brought to the dignity of statistical demonstration the fact that clinics, widely regarded as the chief instruments for the control of syphilis, are so inefficiently run the world over that 20 per cent of their early syphilis material has not received even the minimum of darkfield examination and serologic testing required by the past two decades of knowledge of the disease. Two adequate systems for the treatment of early syphilis can now be issued in black and white for public health and voluntary agents, including private physicians' reference and use: the British-Danish intermittent and the American continuous alternating. Of the two the Cooperative Clinical Group and the United States Public Health Service believe they have proved the alternating continuous treatment to be the better. With new detection machinery in full movement, an enormous influx of seropositive latency is to be expected and must be evaluated and treated. Hospital, and outpatient and practitioner "pick ups" require (1) adequate complete physical examination, not mere listening through the shirt and tapping the knees; (2) with a negative physical examination the beginning of treatment, not by the first arsenical "shot" one can reach, but with bismuth subsalicylate weekly, while one gains the patient's confidence and a spinal fluid examination. For two reasons the author would place the syphilitic woman first rather than fourth among the modern problems of syphilis. Infectious early syphilis of a woman's genital tract is the *terra incognita* of the public health aspect of the disease. The relatively more benign and inconspicious course of the whole infection, which Warthin rated as in her almost a disease in a different animal species, fills the terrain with the unexpected and unpredictable and makes epidemiologic and therapeutic certainties rare indeed. As soon as possible after the recognition of prenatal syphilis, especially of the tardive type, the spinal fluid should be examined in order to forestall the onset of grave neurosyphilis by fever therapy, precisely as one does in acquired syphilis. Few rules will thwart more tragic consequences. Of the therapy of neurosyphilis, Ravault, who brought asymptomatic neurosyphilis to light, died ten years too soon. He suggested and would probably have shown that a great deal of neurosyphilis recovers of itself; that even the paretic formula is compatible with a long, effective and healthy life. It is clearly proved that asymptomatic neurosyphilis tends to be withheld from symptomatic expression or cured by a prolongation plus some form of intensification of standard treatment for the disease. The incidence of asymptomatic neurosyphilis is reduced practically to zero by sufficiently intensive treatment begun early in the disease. Injections of chemotherapeutic agents are merely mediated by the hand and head. Effective treatment for syphilis may indeed be mechanized to a certain perfection by knowledge. But the uprooting of the disease from its hold on humanity is done by the eye, the voice, the understanding and sympathetic spirit, without which all the much gathering of knowledge is but the unliving dust.

NARCOTIC REGISTRATION

During the latter part of May, forms 678 and 713, application for re-registry under the Harrison Narcotic law, as amended, will be mailed to all narcotic registrants. As soon as possible after receipt, the forms should be executed and returned with certified check or money order for the correct tax.

Early filing will not only avoid a delinquency charge, but will be in advance of the rush occasioned by the receipt of Social Security and other taxes on the first day of July.

Article 6, Regulations 5, provides that an inventory may be taken at any time after receipt of forms. This corrects the erroneous opinion of a few taxpayers who believe that they must wait until July 1st to take inventory.

Should any taxpayers concerned with this Act not receive their blanks by June 15th, request should be made of the office of the Collector of Internal Revenue, Indianapolis.

ABSTRACTS

USE OF UREA IN TREATMENT OF INFECTED WOUNDS

HALL G. HOLDER, San Diego, Calif., and EATON M. MACKAY, La Jolla, Calif. (*Journal A. M. A.*, April 3, 1937), treated 139 cases of infected wounds with urea. In no case did the application of urea in solution or as crystals have any deleterious effects. Although in a few cases the application of urea did not appear to influence the course of the condition, the clinical impression was gained that not only was urea therapy efficient, but it was far more successful than the common therapeutic agents used for infected wounds. There are so many factors in each case that it is very difficult to determine the relative efficacy of various medications. These case differences make controls impossible except in the very broadest sense. However, in many of the cases the good results were startling both in long standing lesions that had resisted ordinary treatment and in more recent pathologic conditions in which the result exceeded the usual expectations with diluted solution of sodium hypochlorite or other agents. The best results were obtained with the chronic ulcers, although most of the infected wounds became healed more quickly than can usually be expected. The less positive results for the "infectious group" may have been due to the greater cautiousness with which the ureau was used in these cases. This agent cannot be used sparingly if successful results are to be expected. Several cases of osteomyelitis responded poorly to the treatment, but this may have been because the crystals were used and the exudate may have been insufficient to allow it to penetrate. The solution is the application method of choice in any condition in which a sinus or fistula is involved. The mechanism of urea therapy is probably in part by virtue of the bactericidal effect of strong urea solutions but chiefly through the solvent action on proteins, which leads to a removal of the debris, encrustations and dead tissue, which mechanically and by harboring bacteria are usually the chief deterrents to normal healing.

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ABSTRACTS

INCIDENCE OF CORONARY SCLEROSIS AMONG PHYSICIANS, AS COMPARED WITH MEMBERS OF OTHER OCCUPATIONS

HARRY L. SMITH, Rochester, Minnesota (*Journal A. M. A.*, April 17, 1937), compares the incidence of coronary sclerosis among physicians, bankers, lawyers, clergymen, laborers and farmers among the clientele of the Mayo Clinic. He examined the consecutive clinical records of 307 physicians, 300 bankers, 304 lawyers, 306 clergymen, 306 laborers and 308 farmers. There were thirty-three instances of coronary sclerosis among the physicians, sixteen among the bankers, fourteen among the lawyers, fourteen among the clergymen, eight among the laborers and eight among the farmers. The average age of the patients was about the same for all groups. The author believes that the following may partially explain why there is a much greater incidence of coronary sclerosis among physicians than among the other groups: It has long been recognized that stress, strain, intensity of work and mental worries are factors in the production of coronary sclerosis. A physician's schooling is long and intensive compared with that of the average banker and business man. Undoubtedly a doctor has used up a great deal of nervous energy by the time he has finished school. Secondly, the nature of a physician's work is much more strenuous, and he has not only the responsibility of health, but oftentimes of life itself in his hands. A physician's routine work, which includes ordinary obstetric cases with their complications, broken legs, severe cardiac diseases, scarlet fever and diphtheria among children and pneumonia among the aged, and the responsibility of the surgeons, which is probably greatest of all, is actually or nearly as intense as that of the banker when there is a run on his bank. In other words, what is a crisis for the banker and business man is more or less routine for the physician. One can reasonably conclude that occupation does influence the incidence of coronary sclerosis, that the incidence is lowest among those who do manual labor and highest among those who do mental work, and it would seem that it is highest of all among physicians.

MORTALITY FROM CESAREAN SECTION IN INDIANAPOLIS AND THE CENTRAL STATES

According to DAVID L. SMITH, Indianapolis (*Journal A. M. A.*, April 17, 1937), from Nov. 1, 1927, to Nov. 1, 1928, in four Indianapolis hospitals, the maternal mortality accompanying cesarean sections was 11.3 per cent. In 1934 the mortality rate fell to 4.8 per cent. The rate for the classic technic was 5.1 per cent and for the low cervical it was 4.3 per cent. In 1935 in the same four Indianapolis hospitals, the maternal mortality decreased to 3.2 per cent, the rate for the classic operation being 3.9 per cent, while that for the low cervical was 1.8 per cent. Data have been presented representing the cesarean section practice, preference and technic of 153 members of the Central States Association of Obstetricians and Gynecologists. Sixty-three of these members reported 5,393 cesarean sections with a maternal mortality of 1.4 per cent and a fetal mortality of 2.52 per cent. Of these 5,393 operations, 1,504 were classic cesarean sections with a maternal mortality of 2.85 per cent, and 3,889 were low cervical cesarean sections with a maternal mortality of 0.84 per cent. It is apparent from a study of the Indianapolis work and that reported by the members of the Central States Association of Obstetricians and Gynecologists that the low cervical section is the operation of choice.

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DISTRIBUTION OF PHYSICIANS IN INDIANA

THURMAN B. RICE, M.D.
PAUL S. CONNELL, B.S.
Indianapolis

In the April issue of THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION for 1932, there was presented a series of maps and studies[1] concerning the distribution of physicians in Indiana. Now, five years later, a corresponding study has been made with the intention of making available information concerning the distribution of physicians and other facilities which may be of interest to the members of the profession, to young graduates seeking locations, and to communities which may be in need of medical service. Economic, sociological, political, and other sorts of relations which may be of medical interest are represented graphically when it has been found possible to obtain reliable figures concerning them.

The present paper has been prepared in the hope that it may serve to stimulate other similar studies to the end that the distribution of physicians may be to the advantage of both the public and the members of the profession. A large part of the information has been obtained from the American Medical Directory published by the American Medical Association for the year 1936. It must be remembered, of course, that the data contained in this volume were collected in 1935. This means that the information is not as recent as we should like. Furthermore, it has been necessary to use the 1930 census of the population since there are no more recent reliable census figures. The disturbed economic and sociological conditions in the last few years make it impossible to obtain really accurate information. It is likely, however, that the error in population figures is no more than the usual limit of error in studies of this sort. We present herein a number of maps, shaded in such a manner that there will be very little need for further explanation than that given in the legend which accompanies each map.

Figure 1 shows the population per physician in the United States as of the year 1930. No attempt was made to bring this map up to date. There is little reason to believe that it has changed in recent years. It was impossible to get reliable figures

[1] Rice, Thurman B.: Distribution of Physicians in Indiana. *The Journal of the Ind. State Med. Assoc.*, Vol. XXV, No. 4 (April), 1932, p. 157.

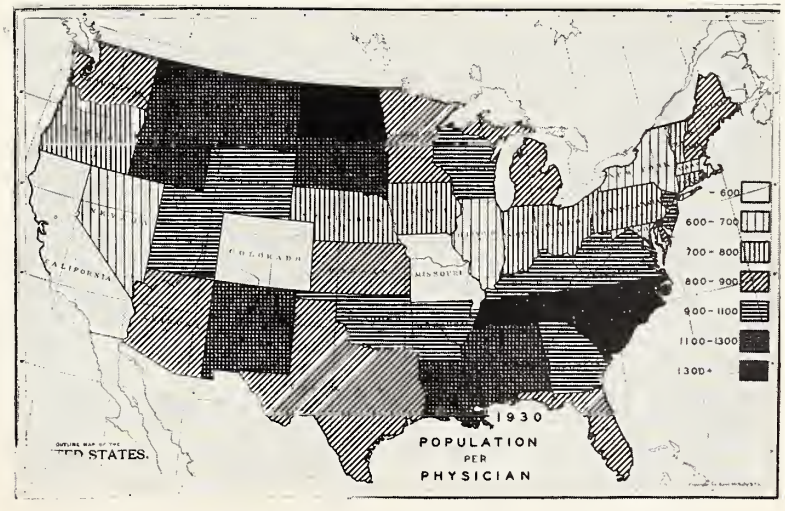


Figure 1. Population per physician in the United States.

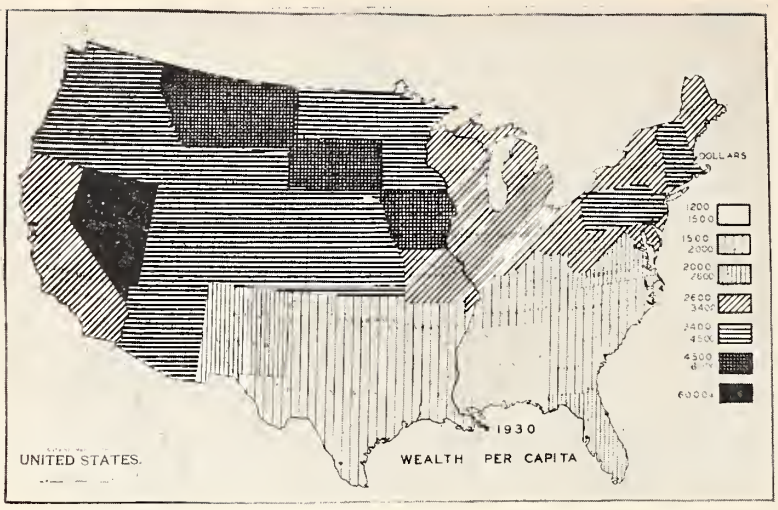


Figure 2. Per capita wealth in the United States.

after 1930. It is given in order that the reader may have a general idea concerning the matter of distribution in the entire country. It is observed that a band of states midway between the North and the South is better supplied than other states. To some extent this may be an attempt on the part of the physician to avoid the extremes of weather, but it is hardly likely that this is the true explanation. Nearly all of the great medical centers of the United States are in this band of states. Furthermore, it is these communities which are best situated economically.

Figure 2 shows the distribution of wealth per capita in the United States. We have chosen for use the 1930 map for the reason that it represents the United States at a more nearly normal period than would the figures that could be obtained at the present time. Obviously, other things being equal, a physician would prefer to be in a prosperous community.

Figure 3 is a map revealing the distribution of physicians in Indiana. The darker counties are those in which there are comparatively few physicians; the lighter ones are the counties in which there are relatively many. Certain counties need a little explanation. Franklin county, for example, is black because a considerable percentage of the medical service of that county is supplied by physicians living just across the line in Ohio. There is no reason to suppose that this county is particularly undermanned. There are five counties which seem to be oversupplied. However, part of this is artifact. Marion county, for example, with its large hospitals supplying the rest of the state, and with its large number of internes, is really not as oversupplied as it appears to be. Tippecanoe county has an unusual number of physicians because of the hospitals there which serve the surrounding counties. Morgan county has several physicians engaged in sanatorium practice rather than in taking care of the needs of the community. Ohio county is a small county geographically, and the physicians there spread into the surrounding counties.

Figure 4 is that of a map of Indiana showing the average age of physicians. Data of this sort is obviously of much value to a young man seeking a location. Other things being equal, a young man will wish to go into a community in which the average age of the physicians is high. The statement has been made that for every physician of 65 or over there is potentially an opening for a younger man. As a rule the physician who has

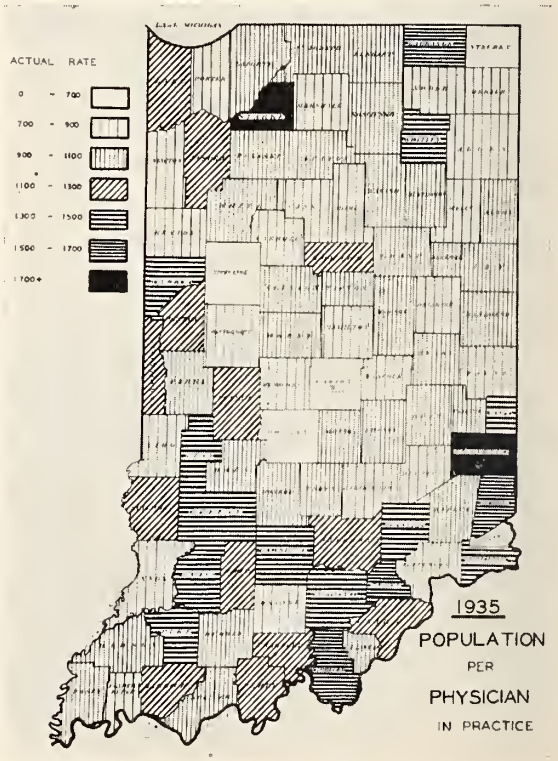


Figure 3. Population per practicing physician.

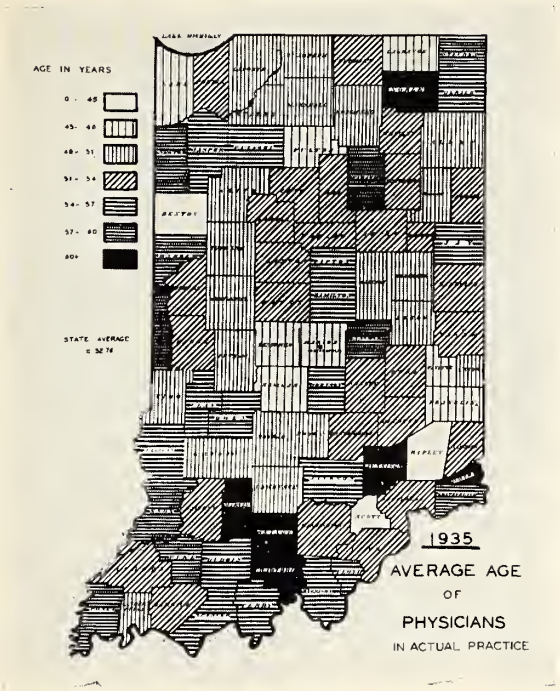


Figure 4. Average age of practicing physicians.

reached this age is beginning to decline in physical vigor, and, as he declines, a young man may be working up. It will be noted that in general those communities which are industrial have attracted the younger men, while rural communities and those in which economic conditions are bad have failed to attract younger men, and, as a result, have a high average age. It is interesting to note that the difference in this respect is not as marked as it was five years ago.

Figure 5 is an attempt to plot in graphic form a very abstract and rather intangible value which we have chosen to designate as medical supply and demand. The coefficient which is shown on the map is obtained by dividing the population of the given county by the product of the active physicians in the community times the average life expectancy of those physicians. The logic for this computation lies in the fact that the need will be in the direct proportion to the population, and in inverse proportion to the probable aggregate years of practice that the physicians will have as a group. A county, then, which is black on the map is apparently in need of physicians. Bear in mind, of course, that Franklin county, which is black, is being pretty well supplied from Ohio. Scott county, which is black, is probably well supplied from adjoining counties having such cities as Madison, New Albany, and Jeffersonville. A map of this sort must not be too implicitly followed because there are very obvious sources of error; however, aside from this, it should give the doctor looking for a location a great deal of aid. It would appear on the strength of these studies that the state is probably better supplied now than five

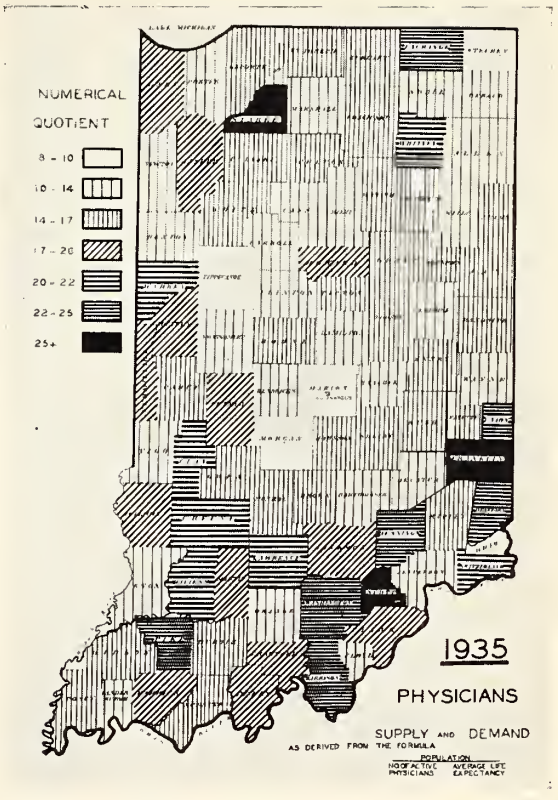


Figure 5. Medical supply and demand.

years ago; particularly is this true in southern Indiana, although northern Indiana has also improved in this respect during this period.

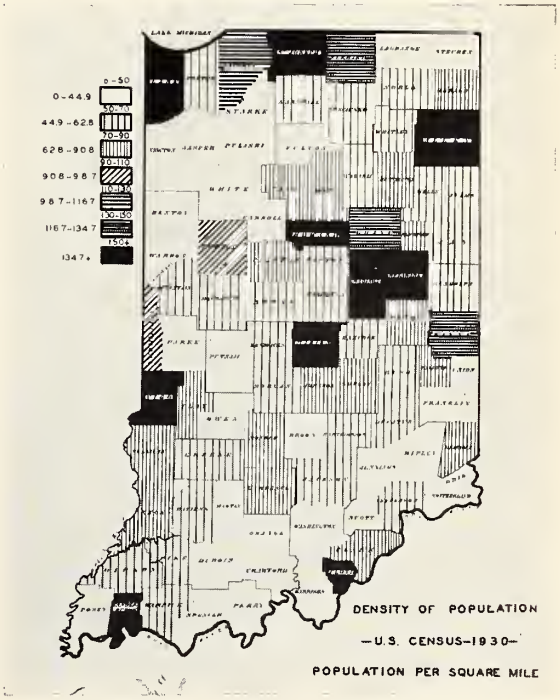


Figure 6. Density of population.

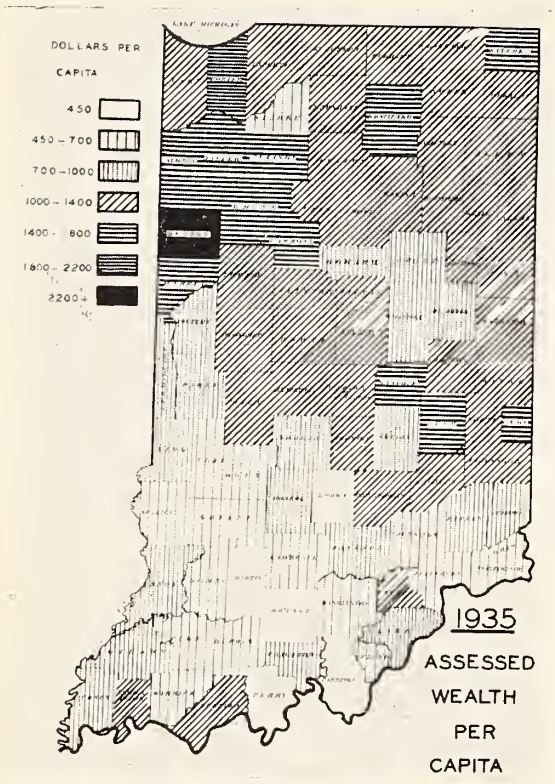


Figure 7. Assessed wealth per capita of the population.

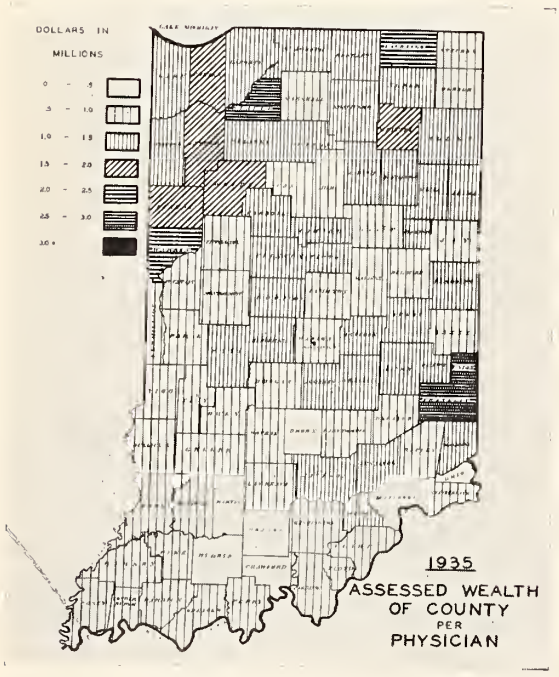


Figure 8. Assessed wealth of county per physician.

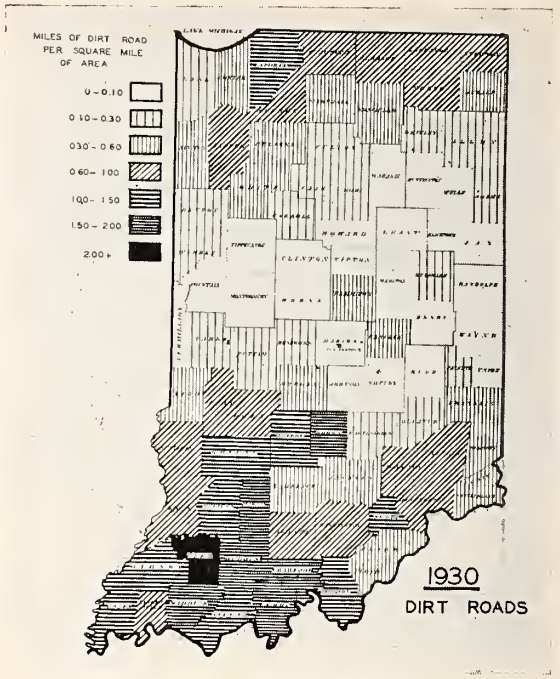


Figure 9. Dirt roads.

Figure 6 shows density of population as of 1930 in Indiana. No attempt has been made to distinguish between rural and urban population because with modern roads, automobiles, and telephones it is possible to regard an entire county as a unit. This map shows the densely populated portions of the state where, of course, more physicians are needed.

Figure 7 shows the assessed wealth per capita for the various counties. It is evident that there has been a very marked decline in this value in the last few years. The relative distribution, however, is essentially the same as in 1930. It is well known, of course, that land values are relatively highly taxed, and for that reason certain communities are shown darker on the map than they really should be.

Figure 8 shows assessed wealth per physician. By this we mean wealth of the population per physician rather than wealth of the physician. Again we must call attention to the artifact that may be shown in those counties close to a state line in which medical service comes from out of the county and the state. This map is a very valuable one, particularly in combination with the one showing medical supply and demand.

Figure 9 is an attempt to present to the physician some idea of the roads of the various counties. Obviously one is much interested in this point. There is little need to show the good roads for the reason that there are already excellent road maps available for the various parts of the state. We would certainly advise that a man looking for prospects actually go into the community and drive over the territory. This map will, however,

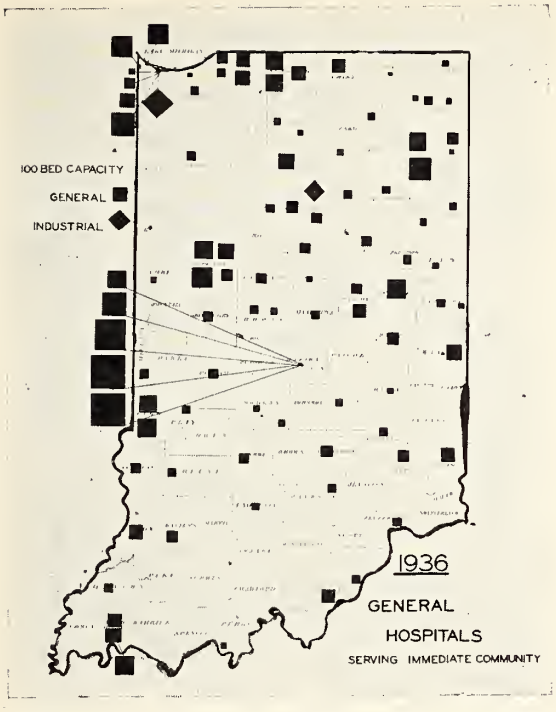


Figure 10. Distribution of general hospitals.

give him a pretty good idea, and will indicate in which parts doctors may expect to get stuck in the mud.

Figure 10 will be of much interest to the modern physician who likes to be close enough to a hospital that he can send his patients there or treat them himself in a hospital. This map shows very marked and definite improvement over the map made in 1931. The size of the spot on the map indicates the size of the hospital. In the left margin of the figure will be seen a key to size. Each of the two squares shown represents a hundred-bed hospital. The figures here represented were supplied by the American Medical Association for 1936. It is likely, of course, that there have been a few since then. It will be seen that the state is well supplied except for an area in the south central part. The state and federal hospitals such as those for the insane, feeble-minded, mental and nervous, epileptic, etc., are not shown for the reason that their distribution is already well known and also because they serve the state rather than the immediate community.

Figure 11 shows the distribution of sanatoria for the treatment of tuberculosis. It will be noted from this that most parts of the state are well supplied, except the southern area. It is, however, exactly these southern counties which are so greatly in need of sanatoria, for the reason that the southern counties have much more tuberculosis than the northern counties. If a line were drawn through the state along the southern border of Marion county, it would be found that the northern counties have roughly 11 sanatorium beds for each 10 deaths per annum, while the counties in the southern half have roughly 2 sanatorium beds for each 10 deaths per annum.

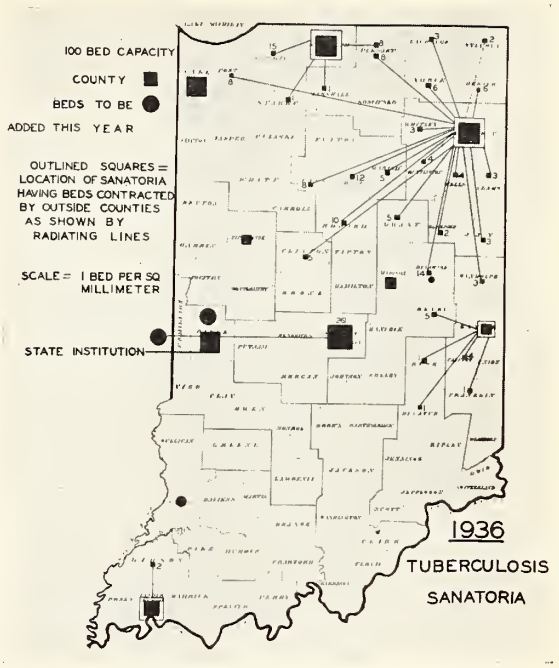


Figure 11. Tuberculosis sanatoria.

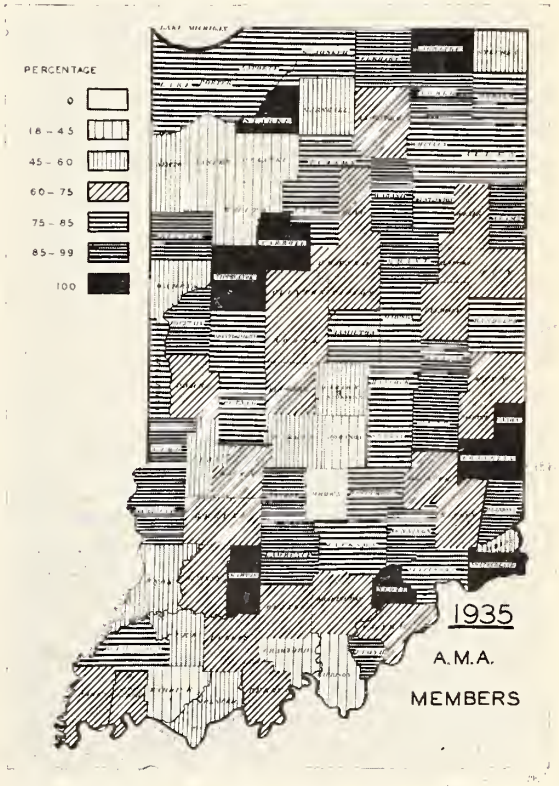


Figure 12. Membership in local medical society.



Figure 13. Distance to nearest physician.

Figure 12 shows the percentage of the physicians who belong to the medical society. Obviously the young physician will wish to practice in a community in which the physicians are ethical and guided by the policies laid down by the profession as a whole. The black counties shown are those in which every practicing physician is a member of the local medical association.

Figure 13 is a map which was made by drawing a circle with a radius representing 7½ miles about each community which had a physician. The statement is often made that people sometimes have to go great distances to get medical service. This is hardly true in Indiana as this map shows. Bear in mind, of course, that the distances shown here are as the crow flies, but it is doubtful if there is any one in Indiana who is further than 15 miles from a physician. Attention is called to the fact that the dark areas along the margin of the state would probably have been wiped out if we had drawn circles about the towns in the adjoining states.

Figure 14 shows the distribution of deaths of physicians. The smallest squares on the map represent one death. The numbers above some of the larger black areas represent the total number for the area just beneath. It will be of interest to note that the average age of death was 62.6 years.

Figure 15 is interesting as viewed alongside of figure 14, inasmuch as it shows location of physicians in the last ten years. It will be seen that there were 1,074 new locations as compared with 1,240 deaths. It is interesting to note that there were four counties, namely, Crawford, Ohio, Vermillion, and Brown, that did not have a single new location within the years 1926 to 1935 inclusive.

Figure 16 shows the origin of medical students for the ten years including 1935. The shape of the symbol indicates the school to which the student has gone. There would be, of course, a few others than those shown here, inasmuch as some medical schools did not answer our questionnaire. We are in a position to know, however, that most of the schools that did not answer had only a few such students, if any. The size of the area in black indicates the number of students. It is interesting to note that while the industrial areas of the state use many physicians, they do not contribute a corresponding proportion of them. On the other hand, the rural sections contribute more than they use. There has been considerable agitation in recent years tending to the reduction of the number of medical students that the medical profession supplied. This is a point that can hardly be settled here, but our study seems to indicate that the profession is not being overcrowded. We must take into consideration, of course, that the population is increasing, and that the forms of medical practice are changing in a way that will require more physicians in the future rather than fewer.

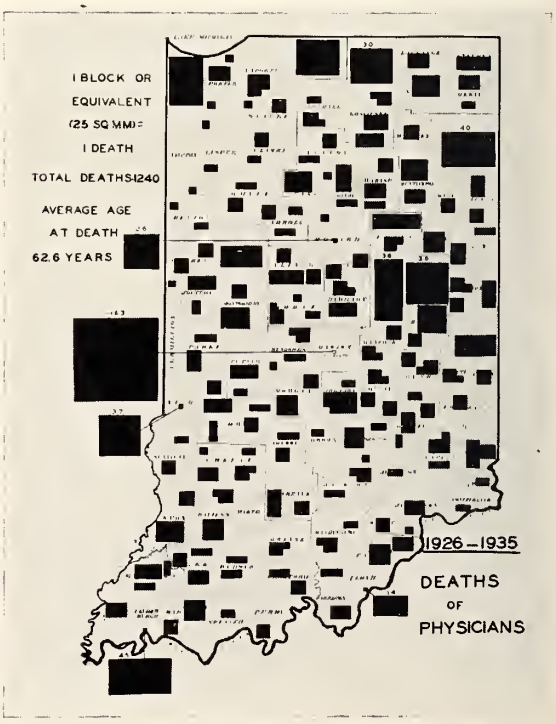


Figure 14. Deaths of physicians.

These maps are presented for what they are worth. No claim that they are faultless is made. We should like the reader to bear in mind that it is very hard to get some of this information, and that the conditions may rapidly change. It is impossible for us to know intimately every community in the state. We believe that the maps are essentially accurate and we hope that they will be useful.

SUMMARY

The following conclusions seem rather apparent from a study of the maps:

1. The distribution of physicians is influenced by the distribution of wealth and industry as well as by the medical needs.

2. Younger physicians tend to go to the cities instead of the rural districts, though this tendency has been less marked in the past five years than in the preceding decade.

3. Several communities, particularly in southern Indiana, will probably be dangerously in need of physicians in the next ten or fifteen years, unless present conditions are corrected.

4. Few communities in Indiana are now in serious need of physicians, so far as present need is concerned.

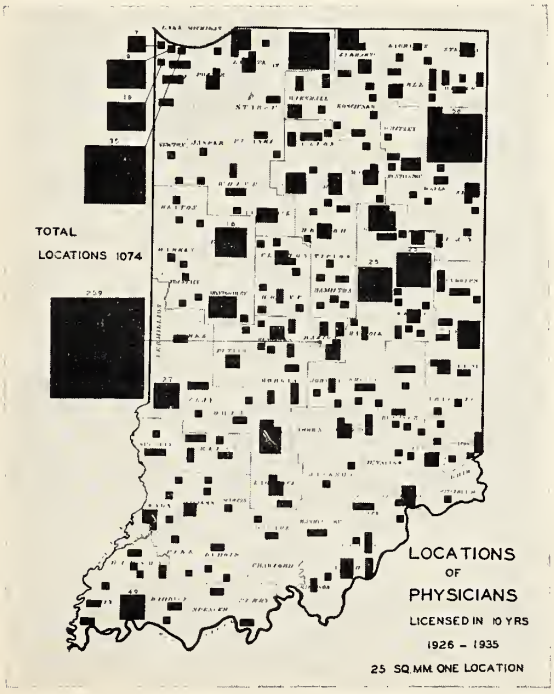


Figure 15. Locations of physicians licensed 1926-1935.

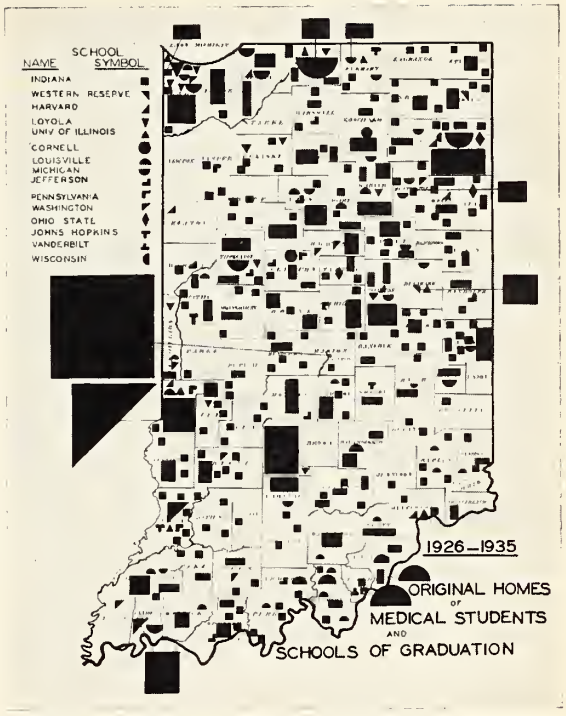


Figure 16. Original homes of medical students who graduated 1926-1935.

5. Modern industrial centers are using more physicians than they produce, while in rural and small town districts, the reverse relation exists.

6. Problems pertaining to the distribution of physicians are capable of being analyzed. It is likely that uneven distribution can be corrected in a large measure by the publication of significant data, such as is used in this paper.

The names of more than 100 delinquent members of The Indiana State Medical Association will be removed from the mailing list of THE JOURNAL for July unless dues are paid promptly.

If you are delinquent, pay your secretary TODAY.

INTRACRANIAL DERMOID

CASE REPORT

N. H. GLADSTONE, M.D.

Fort Wayne

A review of the literature on intracranial dermoids shows them to be of sufficient rarity to warrant recording them when found. Brocke and Klenke[1] in their comprehensive paper published in 1931 reviewed the literature and found only 39 cases reported up to that time. They stated that Cushing, in a series of 1,936 brain tumors compiled in December, 1930, reports only three dermoids, and the New York Neurological Institute in reporting a series of 450 verified cases of brain tumor included only two dermoids. Since then, I have been able to find three other cases of intracranial dermoid reported in the literature. These were reported by J. W. Scott[2] in 1932, Baxter and Haber[3] in 1934, and Phillips and Stone[4] in 1934. The case reported here brings the total to 43.

CASE REPORT

This case is unique in its symptomatology, complications, and pathology. In the available literature, no other case was found that was very similar. The nearest approach to similarity was the case reported by Todesco[1],[2] who described the case of a female child, aged one year and five months, who was born with a cyst on her posterior occipital protuberance. The cyst grew larger, was removed, but continued to discharge from the wound. She later developed symtoms of headache, vomiting, dullness, stupor, followed by convulsions, coma, and finally death. At autopsy a white cyst about the size of a hen's egg was found in the right cerebellar hemisphere. This tumor was of the dural communicating type, similar to the one reported here, and contained hair and pus.

History: Periodic spells of projectile vomiting, extreme muscle weakness, irritability, constipation, and what appeared at times to be spasms of pain. Symptoms were first noticed in December of 1935 at which time the child, a female, was about one year old. At that time, for a period of about one and a half months, she was in the hospital for study. No definite diagnosis was made and the child was discharged unimproved.

Both parents are in good health. There are no familial or hereditary diseases. The father is a Filipino by birth; the mother is a white American woman.

The child was born through normal delivery and was an apparently normal acting baby with no illnesses. She had been very active, alert, and unusually bright, grasping ideas quickly. One detail of the past history which was previously thought insignificant but later proved to be important was that the child was born with a small protuberance in the mid-occipital region. This became infected, and the mother, thinking it was a pimple, lanced it with a sterile needle. A little pus would drain out, and the spot would apparently heal, only to recur a few months later. It was lanced in this way three times, the last time being in February, 1936.

Following the child's release from the hospital in January, 1935, the attacks of projectile vomiting gradually became more frequent. The child became weaker, more irritable, less active, and refused to try to walk.

I first saw the baby March 19, 1936. At that time and on subsequent visits, examinations revealed the following findings and sequence of events.

The child was well-nourished and well-proportioned, irritable on attempted examinations. The head was held to the left, but there was no neck rigidity. There was an apparent bulging of the forehead, and the circumference of the skull was slightly increased. Anterior fontanel was open. Ears were normal. Pupils reacted slowly to light; discs were choked. There was no attempt to use the legs. The deep tendon reflexes were confusing with rather bizarre reactions, yet the Westphal was overactive on either side and the Babinski phenomenon was present bilaterally. Kernig's and Brudzinski's signs were absent. No abdominal reflexes could be elicited.

The child became more irritable, cried almost constantly, appeared to have headache, and projectile vomiting became more frequent. She was sent into the hospital again on April 10, 1936. A diagnosis was made of intracranial pathology (probably brain tumor) with associated internal hydrocephalus. The neurological signs were so vague and variable that it was impossible to localize the lesion in a child so young. During the stay in the hospital the temperature was fairly normal the first seven days. On the fifth day the child became stuporous and had two generalized convulsions of a few minutes duration, which were epileptiform in character. Soon she developed a lateral nystagmus, and in a day or two it was apparent that she was totally blind. Her eyeground at this time showed definite optic atrophy. Several examinations of the eye grounds five months previously had been reported normal. Her head seemed to be getting larger and the anterior fontanel was bulging and tense. A lumbar puncture was done, and the fluid was found to be under increased pressure. The Queckenstedt test responded normally. On reducing the spinal fluid pressure, the tension in the fontanel was relieved and the child's general con-

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[1] Brocke, S., and Klenke, D. A.: A Case of Dermoid Overlying the Cerebellar Vermis. *Bull. Neur. Inst. of New York*, Vol. I, No. 2, pp. 328-342, 1931 (June).

[2] Scott, J. W.: Dermoid Cyst of the Brain. *Proc. Roy. Soc. of Med.* Vol XXV, No. 5, p. 720 (March), 1932.

[3] Baxter, E. G., and Haber, G. B.: Dermodi Cyst of the Midbrain. *Jour. Pediatrics.*, Vol. 4, No. 6, pp. 795-797 (June), 1934.

[4] Phillips, P., and Stone, D. M.: Cerebral Dermoid. *The Bristol Medico-Chirurgical Journal*, Vol. LI, No. 194, p. 247-252, 1934.

dition seemed to improve, although the projectile vomiting continued. The child was retaining only about one-fourth of the food ingested. She became weaker, dehydrated and emaciated in spite of supportive treatment.

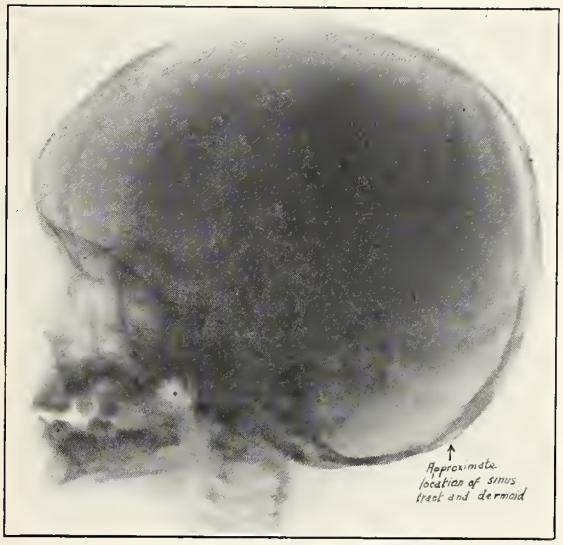


Figure 1. Arrow points toward approximate location of the sinus tract and dermoid cyst within the cranium. Note the bulging frontal bone, open anterior fontanel, and widened sutures, all produced by the hydrocephalus.

During the last two weeks, the child developed periods of coma when her temperature would rise for a day or two, and there would be periods of Cheyne-Stokes respiration. Lowering of the pressure through spinal puncture would relieve these symptoms temporarily, and a total of ten such spinal punctures was done. About a week after admission in the hospital, the small occipital protuberance was first noted, and its history obtained from the mother. Upon examination, this small protuberance felt like a small wen about one-eighth inch in diameter. It was firm and round, lying under the skin of the scalp, and seemed fixed at its base to the underlying tissue and skull. It was located in the mid-occipital region, and appeared to be very inactive. Little significance was attached to its presence then. Blood counts, urinalyses, Wassermann and spinal fluid tests were negative and uninforming. An x-ray of the chest was negative; von Pirquet test was negative. A stereo of the skull taken April 24, 1936 (see Figure 1), showed the following: "Films show no evidence of bone destructive processes. Sutures are widened all over the skull. The anterior fontanel is bulging. A generalized haziness is shown due to the increase in fluids. The picture indicates hydrocephalic skull." Ventriculograms were not done, due to parental objections.

The child died on May 8, 1936. An autopsy report of cranial findings is as follows: "Body is that of a well developed and moderately emaciated white female baby about sixteen months old. The anterior fontanel is not closed, measuring about 2 x 1 inches. Practically all of the sutures are soft and widened. The palpating finger can detect a furrow through the scalp, especially over the fronto-parietal suture. The head is of the square box shape, very much enlarged and bulging. The face appears very small compared with the skull. There are no subcutaneous swellings, no hemorrhages. The face and skull appear symmetrical (both sides equal). There are shown no defects of the face, mouth, or nose.

"Skull opened: Meninges are very dry. Blood vessels are collapsed and very small. All the cerebral convolutions are flattened. There was found no purulent matter anywhere except a few small fibrinous (partly purulent) flakes on the anterior surface of the medulla oblongata. Brain was carefully delivered from the bony cage. Hemispheres (both) were opened and a large amount of a clear fluid ran out from each ventricle (a rough estimation of fluid is about 5 to 7 ounces from both sides). The entire cortical tissue of the hemispheres is completely compressed and atrophied. There are shown no tumor masses or any hemorrhages anywhere in the cerebral hemispheres. The cerebellum is very soft. When cut into, a large abscessed cavity was found occupying the entire right half extending across the midline and involving half of the left side. The base of the right half of the cerebellum shows a small degenerating dermoid cyst (contents mostly thick sebaceous material and hair) which was seen and traced posteriorly through the dura and ending in a round smooth cavity in the occipital bone, midline, just below the external occipital protuberance. The cavity measures about 2 cm. in diameter and is completely filled with the same thick sebaceous material. The entire inner table of the occipital bone is resorbed and a small probe could be passed through a small hole communicating with the deep subcutaneous tissues of the scalp. On the scalp opposite this bone resorption there was present no abscess. Mastoids were normal. There was presented no bone necrotic process anywhere in the frontal bones. Smears made from pus of the cerebellar abscess showed many pus cells and staphylococci.

"Summary: 1. Advanced internal hydrocephalus with complete atrophy of the cerebrum.

"2. Abscess of the cerebellum secondary to a degenerating dermoid cyst communicating with the subcutaneous tissues of the scalp—occipital region."

COMMENT

The hydrocephalus, due to its marked advancement, probably was present from birth. Likewise the dermoid cyst with its sinus tract may be assumed to have been present from birth, as shown

in the history obtained from the parents. The cerebellar abscess was a later development occurring probably in the last two or three months, and resulting from secondary infection of the dermoid. It was just in the last three days of illness that the occipital area in the scalp became slightly inflamed, giving the appearance of inflammation resulting from constant pressure of the head against the bed. The apparent inactivity of the dermoid sinus probably is explained by the dermoid within, plugging and obstructing the sinus outlet.

In summarizing the characteristics of the 39 cases reviewed by Brocke and Klenke and others (as mentioned at the beginning of this paper), and comparing them with the characteristics that this case has in common with them, a few interesting facts were noted and compiled. Of the total of 43 cases of intracranial dermoids, 13 were in children less than ten years of age; 17 of the group were in females; 37 were single tumors, the others multiple; 33 were cystic in nature, the consistency of the others not being mentioned; 7 were of the dural communicating type, and the majority were of the pial type. The associated peculiarities of this case make it distinctive from any of the others recorded. Here we have an unusual and misleading symptom complex resulting from three major pathological conditions within the brain, namely, a brain tumor (dermoid), a brain abscess, and an internal hydrocephalus.

304 EAST WAYNE STREET.

ABSTRACTS

MODERN CLINICAL MANAGEMENT OF GONORRHEA

P. S. PELOUZE, Philadelphia (*Journal A. M. A.*, March 6, 1937), confines his dissertation purely to the medical side of the question, suggesting that a uniform history blank should be used throughout the country. With such uniformity, it would be a rather simple matter to decide on the comparative values of the different types of treatment now in use. Also, the study of such histories would do much to teach those using them far more about the disease and the things that are or are not good for it, a gain that would reflect itself in many good ways. The one in charge of a treatment center should be really interested in the disease. Lack of such interest makes for poor work and for poor personnel cooperation. It does little toward disease reduction. Younger men in such dispensaries should be compensated for the services rendered. There should be a close alliance between the chiefs of dispensaries, their assistants, their local and state boards of health and the United States Public Health Service as a means of making each one who treats the disease feel that he is a part of a campaign of disease reduction and that someone cares. So far as such a thing is possible, efforts should be made to carry out an educational campaign among those who treat the disease. In this way interest will be stimulated and better work will result. Also, there would be built up a degree of sanity regarding the disease and its treatment that would reduce to a minimum the dangers of the exploitation of treatment methods that have little or nothing to offer. Such things retard advancement and often work to the harm of thousands of patients.

EPISIOTOMY AND REPAIR*

INDICATIONS AND TECHNIC

DAVID L. SMITH, M.D.
Indianapolis

Much has been written about methods of reducing obstetrical maternal mortality. However, attention should also be directed to obstetrical injuries which do not kill but certainly cripple the women who suffer them. Among these is pelvic floor damage.

Childbirth at some prehistoric time may have been a physiological process, but at present it borders on the pathological in almost all cases. The truth of this statement becomes apparent when we consider the frequency of early and late toxemia, laceration of cervix even in spontaneous deliveries, and the frequency of damage to the pelvic floor, which in some degree accompanies most primiparous deliveries.

In present day obstetrical practice, it is an accepted fact that the spontaneous delivery of a full term infant will almost universally be accompanied by some damage to the pelvic floor. This may be slight, but usually it is enough to give symptoms in later life. No other evidence is needed to support this statement than the known frequency of cystocele and rectocele, and some degree of prolapse in parous women of forty or more years of age.

At some time, centuries ago, it may have been possible for a young woman to escape this obstetrical damage but that is doubtful. This doubt is based on the experience of medical missionaries in the far East where conditions are almost as primitive as human beings could tolerate. These men say that prolapse, cystocele and rectocele are as common in those countries as in our own.

In this country, marriage is occurring later and later, which accounts partially at least for the fibrous, inelastic perineal tissues so frequently encountered. We believe the ideal age for the first childbirth is between 18 and 20. The average primiparae encountered in private practice is near 26 years of age. Many are 30 or above. We must meet conditions as they are rather than as we would choose to have them.

Transverse contraction of the bony outlet, of course, causes more damage to the soft tissues than occurs when the pubic arch is normal, but the fact is that even in the presence of a normal bony outlet, soft tissue perineal damage is usually major in extent, no matter how slowly the head is delivered.

Some may disagree with this statement, but if the perineum is examined at six weeks, six months, and one year postpartum, the large majority of patients will show relaxation of the pelvic floor with some degree of pouching of the anterior vaginal wall unless episiotomy has been done. This will be true even if there has been no visible laceration at delivery.

* Presented before the Indianapolis Medical Society, January 19, 1937.

The pelvic floor is composed mainly as follows:

1. The transversus perinei muscle.
2. The constrictor cunni muscle.
3. The levator ani muscles.
4. The pelvic fascia.

These first two muscles are universally damaged but are relatively unimportant.

The levator ani is an important part of the pelvic floor but is not damaged unless the laceration is deep.

The fourth structure, the pelvic fascia, is a very important part of the pelvic floor. We believe that the fascial damage is largely the cause of the relaxation which later demonstrates itself in the form of cystocele, rectocele and prolapse even though examination of the perineum showed no damage at the time of delivery.

Brief consideration of the course of the pelvic fascia will be of value in understanding damage to the fascia done by passage of the fetal head through the birth canal.

The fascia on the inner surface of the obturator internus thickens into a ridge called the arcus tendineus of the levator ani, or the "white line." Here the fascia splits into two layers, one going beneath and the other on top of the levator ani muscle. A short distance below the white line, the layer on top of the levator ani thickens to form the fascial base for the broad ligament. This base splits into four layers, one going anterior to the bladder, the second between the bladder and vagina, the third between the vagina and rectum, and the fourth posterior to the rectum. These fascial planes are bound together around the vagina and cervix like a hub and radiate like the spokes of a wheel. The integrity of all these layers is essential to proper support of the bladder, uterus, and rectum.

The levator ani muscles join posteriorly at the sacrum and coccyx leaving a U-shaped opening for urethra, vagina, and rectum. At the open edges of these muscles the fascial plane under the muscle joins with the one on top of it and fuses in the mid-line with that from the opposite side. The inferior fibers of the third plane described above also fuse into these fibers, altogether forming the intracolumnar fascia of the perineum between the vagina and rectum.

The pelvic fascia is composed mainly of white fibrous tissue which has no elasticity. If subjected to excessive stress, it tears. Multiple minute tears in the layers supporting the bladder and rectum undoubtedly cause prolapse of these organs. It is our belief that such damage occurs in some degree in practically all primiparæ. This we believe to be true no matter how elastic the muscular tissue may be.

The essayist is aware that a statement that perineal damage of some degree accompanies most primiparous deliveries will incur the wrath of men sincere in the belief that this is not true. With such men, the essayist has no quarrel; he merely hopes that this discussion will stimulate consistent follow-up examinations of the pelvic floor of their patients.

The above conclusion was not arrived at quickly. In fact, many deliveries were done without episiotomy in cases selected because of seemingly elastic perineal tissue. The perineum was first ironed out and the head delivered slowly. In only two cases was I satisfied with the result. In too many, the perineum was intact one instant and deeply lacerated the next. In too many others there was no skin tear, but deep tears inside the vagina which were impossible to repair satisfactorily at the time because of their irregular shape and because of immediate hemorrhage into the tissue. Many times I sincerely wished it were possible to go back and deliver that patient over again so I could have a clean, even episiotomy wound to close instead of the ragged, unsurgical task which then faced me. Gradually it became clear to me that I was getting good pelvic floor results only in those patients where moderate ironing out of the perineum had been followed by elective episiotomy.

Episiotomy means hospitalization, because in my experience home delivery does not allow sufficiently good position, light, assistance, and aspesis for satisfactory repair of an episiotomy. We must, therefore, divide our patients into two groups: first, those for whom home delivery is a necessity; and, second, those for whom hospital delivery is possible.

For the first group, from the pelvic floor standpoint, we should recommend that these women should bear their desired number of children and then expect the necessity of reconstructive pelvic floor surgery. The essayist realizes the partial impracticability of such a program because of the possibility of a pregnancy subsequent to the surgery.

For the second group, that is the hospital group, episiotomy should be practiced for the purpose of pelvic floor protection in most primiparae.

This may seem as if we are advocating surgical deliveries for all hospital patients, and we are to the extent of advocating episiotomy for primiparae, for the sake of the integrity of the pelvic floor in these patients. Standards of good practice do not remain static in any branch of medicine.

Two types of episiotomy are common, the central and the medio-lateral. The central is easier to repair because the resulting wound is symmetrical, but it has the disadvantage of extending into the rectum if there is any tear beyond the lower end of the incision.

The medio-lateral incision is, therefore, generally accepted as the better. In this the incision is started exactly in the midline and continues posteriorly and laterally, thus avoiding the rectum.

The patient should be in moderate lithotomy position with the caput distending the perineum. With the patient under light ether anesthesia, the bladder should be emptied by catheter and the

perineum "ironed out" gently, using sterile soap as a lubricant. This ironing out process is essential because if we do not avail ourselves of all the elasticity in the perineal tissues the episiotomy will be unnecessarily deep. The perineum is incised as described and the head delivered either by outlet forceps or fundal pressure.

It is important that the episiotomy not be done until the head is distending the perineum. If done earlier, subsequent manipulation will cause an increased chance of infection.

The perineal repair should not be started until after the delivery of the placenta in order to avoid unnecessary stress on sutures.

There are many different methods of repairing an episiotomy. No matter what the technique, several general rules must be followed to obtain good results:

First: Strict asepsis. Careful avoidance of contamination from the rectum is essential. For this reason sponges should be used once and discarded. Sutures should not be allowed to fall down over the rectum while in use. Frequently changed sterile perineal pads over the rectum are helpful in avoiding rectal contamination.

Second: No matter what suture material is used, there is a foreign body tissue reaction which may cause sloughing. Therefore, suture material should be as fine as practical and the amount used should be reduced to a minimum. Buried knots should be avoided whenever possible.

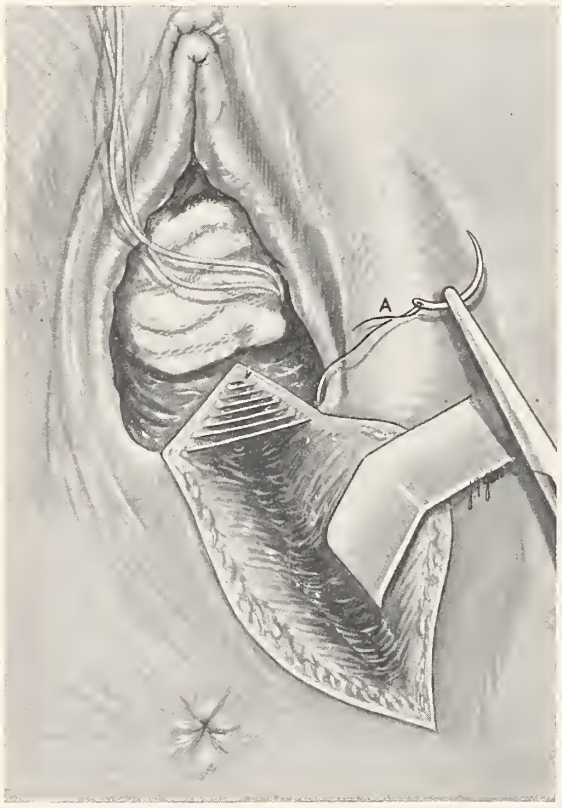


Figure 1.

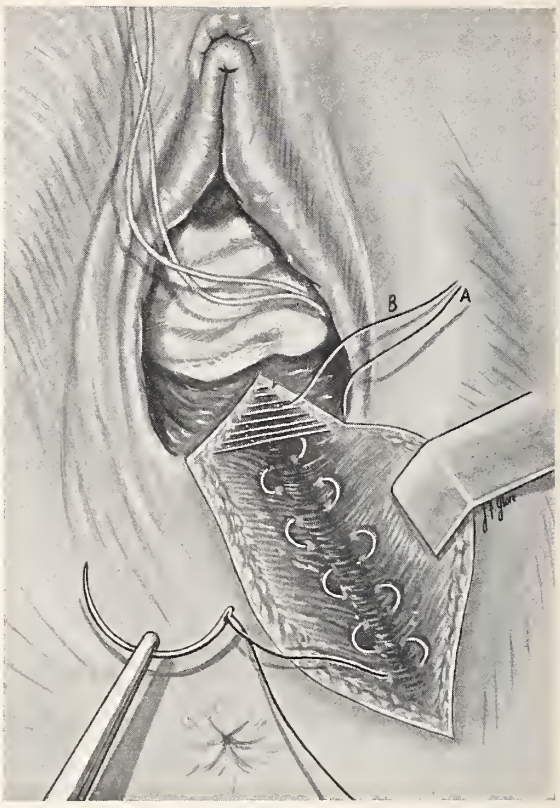


Figure 2.

Third: Tissue should not be pulled together in such a way as to cause tension. Deep tissue must be sutured to deep tissue, muscle to muscle, and fascia to fascia, not muscle to fascia. There must be no tension anterio-posteriorly.

Fourth: Sutures must not be under too great tension, but should be put in with enough slack to accommodate the edema of tissue which occurs within a few hours.

Fifth: The closure must be water tight so as to prevent seepage of lochia into the wound.

Sixth: No dead space is to be left in the wound.

Seventh: The perineum should be let alone during the puerperium. The best treatment is no treatment, except cleansing with cotton lysol sponges after defecation and urination. No ice bags, hot compresses or other local medication is used to promote comfort. Instead, the patient should be kept comfortable by suitable oral or hypodermic medication when necessary.

The question of non-absorbable suture material versus catgut is easily settled, in my opinion; the advantage is all on the side of catgut. The two causes of failure in healing are infection and tissue put together under stress. If these two are avoided, the tissue will heal before the catgut is absorbed. The use of catgut avoids the pain of removal of silkworm, dermal, etc., and also prevents sinus formation which occasionally follows non-absorbable sutures.

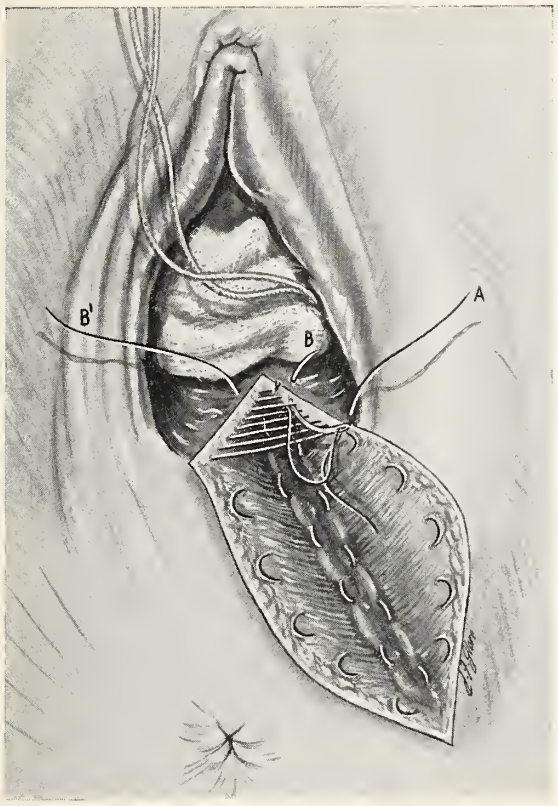


Figure 3.

Probably the easiest repair of an episiotomy wound is by massive interrupted figure 8 sutures. The deep loop of the figure 8 closes muscle and deep fascia, and the superficial loop closes vaginal mucosa and skin. This is a workable method of closure but it has three disadvantages, namely: (1) there is no accurate apposition of tissue layer for layer, (2) there probably will be pockets of dead space left in the depth of the incision, and (3) the suture lines are not water tight.

The advantages of the method are that it is simple, easy and rapid. Episiotomy and a figure 8 closure will give a better pelvic floor than that obtained without an episiotomy in most cases.

The most widely used method of closure is some modification of the continuous suture technique, for the reason that it is rapid, it gives accurate approximation of tissues, it eliminates many buried knots of catgut, and it is water tight.

The following technique is the essayist's modification of the continuous suture method.

TECHNIC OF EPISIOTOMY

Fresh towels are put in place after delivery of the placenta, a Gelpi perineal retractor is used to obtain the necessary exposure, and a vaginal pack is put in place to keep blood from running into the wound.

Twenty-day chromic No. 1 is used throughout in the form of continuous sutures.

Plate No. 1 shows the first suture, which is a submucosa stitch beginning at the posterior and closing the vaginal mucosa. This suture (A) is brought up through the mucosa at the entroitus and not tied, the loose end being laid up out of the way for later use.

Plate No. 2 shows the next suture. It is in the muscle and is started just under the vaginal mucosa back at the depth of the incision. It is tied but the short end is not cut (Suture B). The suture is a continuous one from above downward, and then more superficially from the lower angle back up to the starting point, the suture being carried through the vaginal mucosa on the left side (Suture B,[1] Plate No. 3). The needle is removed and rethreaded on suture B, the uncut short end, and brought up through the vaginal mucosa on the right side as shown in Plate No. 3. The vaginal mucosa suture is pulled tight (Suture A) and then B and B[1] are tied. thus locking suture A.

The next suture (Plate No. 4) is started by taking a generous bite on either side just under the mucosa (Suture C—C[1]). It is then tied, thus bringing together the fibers of the constrictor cunni and transversus perinei muscles. The short end is not cut. This suture is put in as in Plate 2 from above downward closing deep fascia, and from below upward to the forchette, closing superficial fascia. At the forchette it is brought up through the vaginal mucosa on the left, the needle removed and rethreaded on the short end as before, Plate No. 3, and tied as before. The vaginal mucosa Suture A is now tied to this last suture, both knots being in the vagina.

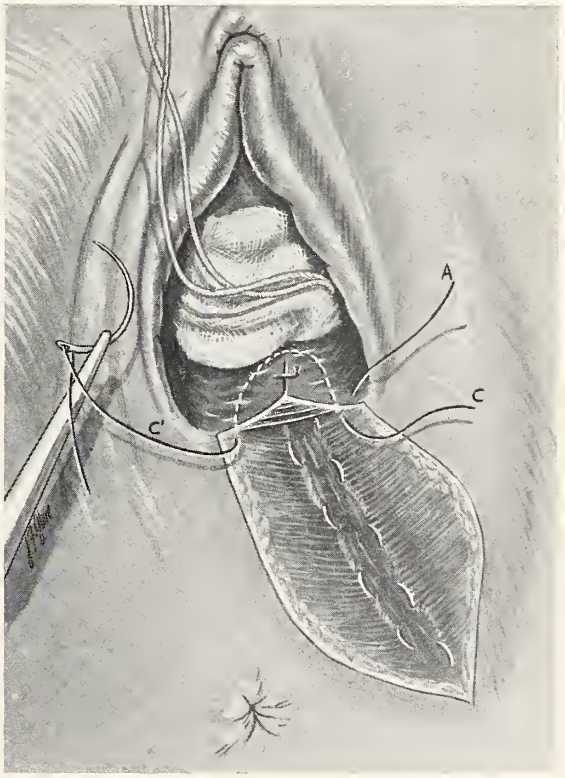


Figure 4.

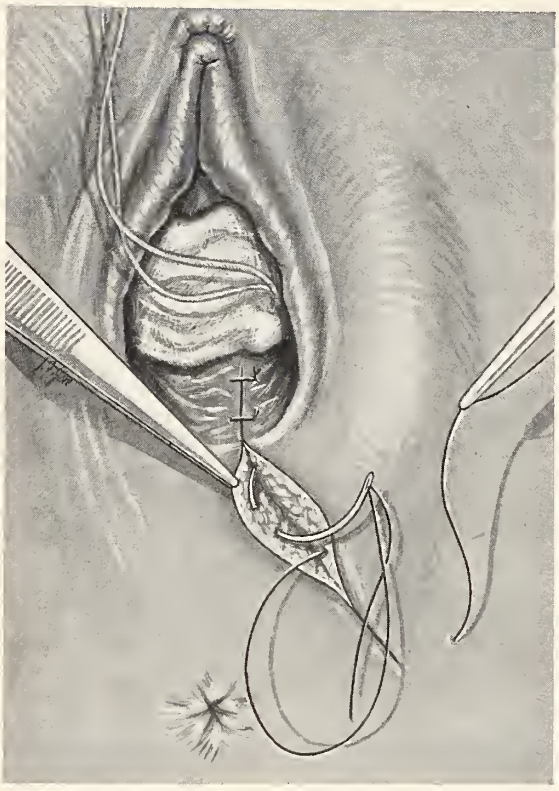


Figure 5.

The skin is closed with a subcuticular stitch as shown in Plate No. 5, the ends being secured by perforated shot.

SUMMARY

The high incidence of serious pelvic floor damage accompanying childbirth is not generally recognized. The essayist endorses the practice of episiotomy in most primiparae at term as a means of preventing a large part of this damage.

A continuous suture technique of episiotomy closure is here described.

The advantages of the method are:

1. It gives a water tight closure.
2. It approximates tissues accurately.
3. It eliminates all but three buried suture knots.
4. The results of the technique are satisfactory.

723 HUME MANSUR BLDG.

Physicians registered under the Harrison Narcotic Act must reregister with the Collector of Internal Revenue on or before July 1, 1937. Penalties are leviable against those who fail to reregister within the allowed time.

CYCLOPROPANE ANESTHESIA

CERTAIN FUNDAMENTALS OF TECHNIQUE

FLOYD T. ROMBERGER, M.D.

Lafayette

In the January, 1935, issue of this journal was published a practical chart of the signs and phases of cyclopropane anesthesia.[1] This graph was so enthusiastically received and so favorably commented upon during the ensuing months that it is deemed worthwhile to supplement that discussion with a more detailed exposition of certain fundamentals in the technique of administration, the same being substantiated by three years of clinical application. This thesis, accordingly, is presented for the mature consideration of those who wish to study the immediate effects of, to acquire a safe and sound knowledge of, and to develop rational experience in administering cyclopropane gas for surgical procedures. The reader is presumed to have at least an elemental foundation in the signs and basic phenomena which accompany the application of narcotic and anesthetic drugs in the relief of surgical pathology and, perhaps, to be practiced in the art of producing ether, nitrous oxide-oxygen, ethylene-oxygen, and other types of anesthesia. This is essential.

Cyclopropane is a hydrocarbon gas. Its empirical formula is C_3H_6. Its efficacy in inducing sleep and surgical anesthesia is almost astounding to the uninitiated. This readily is appreciated by those familiar with the essential characteristics of nitrous oxide-oxygen and ethylene-oxygen anesthesias which usually are administered with percentages of oxygen (depending on the patient, the surgical condition, and the amount and kind of basal narcosis) in varying amounts from nine or ten or up to, perhaps, as much as twenty or a little over, the balance being the anesthetic gas. However, in cyclopropane anesthesia, the situation is reversed. The oxygen percentage is higher; the anesthetic percentage is lower. The reason is that, with cyclopropane-oxygen, marked anesthetic effects are produced with forty per cent cyclopropane and sixty per cent oxygen (this high mix is rarely used and then but briefly and only by those expert) on down to fifteen per cent cyclopropane, the remainder being excess oxygen, again depending on the patient, the surgical condition, and the amount and kind of basal narcosis.

The above percentages are mentioned merely as a rough and ready index to the differences in potential existing and as an evidence of the change in ideas necessary in the adopting of a rational cyclopropane-oxygen technique. The figures are stated without the slightest thought or inference in the least that any given degree or depth of anesthesia can be induced and maintained in any given individual patient for any given surgical procedure by any set percentage of anesthetic drug, what-

[1] Romberger, F. T.: Signs and Phases of Cyclopropane Anesthesia. *Jour. Ind. St. Med. Assoc.*, Vol. 28, No. 1, (Jan.) 1935, p. 18.

soever the agent. Such premise, indeed, is false; the human equation, alone, is too variable, to say naught of such contributing factors as idiosyncrasy, basal narcosis, surgical procedure, and surgeon.

Forget if you will (or can) about percentages and think of amounts; i.e., *quantum sufficiens* to produce an effect. For example, in an ordinary open ether anesthesia you do not consider percentages, particularly, or even drops or cubic centimeters; you give enough to produce a certain effect in a certain individual for a certain surgical procedure, watching closely, using the patient as the index of dosage. In other words, the signs of the oncoming or established anesthesia are your guideposts as to how to drop (or pour) the ether. This, actually, is what happens in every anesthesia, and this is right. Nothing could be more reasonable. The parallel is true of cyclopropane-oxygen. You let the patient breathe in and out of a bag full of oxygen (after the first breath, the bag will contain an undetermined oxygen-air mix); to this you add a thin stream of cyclopropane, watching and anticipating the on-coming signs of anesthesia. These you must know. Now, nothing is more simple; nothing more reasonable. The expert, perhaps, rather would like to start the induction with a bag containing certain definite quantities of cyclopropane-oxygen, as his experience may dictate. This, too, is reasonable, because he knows what to expect; i.e., the induction will be more rapid (sometimes startlingly so), and the narcosis will deepen in a quite measurably shorter period.

The above facts are cited in brief largely for the purpose of stressing one of the most elementary and yet one of the most outstanding principles governing anesthesia in general, regardless of agent, and to show later how perfectly and how flexibly cyclopropane gas fits into the picture of those things which we already know.

PHYSICAL PROPERTIES

Cyclopropane is heavier than air. The pure gas and high-concentration mixtures will tend to drop toward the floor as does ether vapor. The gas may coast along the edge of an operating table from the head of the patient toward the feet. It is important to remember this fact in the event that this particular anesthetic is used for surgery wherein is employed the actual cautery or electrical equipment of high potential.

Cyclopropane gas is flammable and is very explosive when admixed with air or oxygen. The range of explosibility with air is rather narrow, being from 3% to 8.5%, but with oxygen the range is wide, 2.5% to 50%. In this connection it should be remembered that ether - air, ether - oxygen, ethylene-oxygen, nitrous oxide-oxygen-ether, and all of their various combinations also are very explosive. It seems almost impossible to eliminate entirely all fire and explosion hazards from anesthetic mixtures and combinations, with the exception of chloroform (flammable but not explosive) and simon-pure nitrous oxide-oxygen without a trace of ether. However, the explosion hazards may be reduced to almost a negligible minimum by certain precautions, and since cyclopropane is under discussion, it will be elected as the type. In the first place, only the most modern gas-oxygen equipment, especially constructed or adapted, should be employed. Under no circumstances should a machine be used where there is even the remotest possibility of a gas of one kind flowing into and mixing in the various cylinders with a gas or gases of another kind, whatever the anesthetic gas—or with oxygen. Secondly, cyclopropane is most safely administered—also most perfectly, most exactly, most expertly, and most economically —by a rebreathing, circle-type, carbon dioxide absorption technique. Not only does this method save gases (barring leakage and faulty application of the face-piece), but, also, no cyclopropane will escape into the operating room to become a definite hazard. It will be remembered, of course, that even if one or two bags full of cyclopropane-oxygen are lost into the operating room the amount of gas probably would not exceed from one and one-half to three gallons. This quantity, completely diffused, would be entirely negligible. The danger would be in having a spark or flame at or near the point of escape, where the concentration is the greatest, or to have the gas collect in an unventilated corner or pocket. Still further, and undoubtedly of greater importance in reducing explosion possibilities, is the fact that in such a modern closed system of anesthesia there always is present practically one hundred per cent humidity, as is evidenced at all times by the condensed moisture in the breathing bag. There are those of authority who claim entire lack of explosibility in the presence of such high humidity. Finally, extreme care should be exercised when administering cyclopropane-oxygen while the actual cautery, the radio knife, x-ray, fluroscope, an open flame such as often is present in sterilizing rooms and in dental offices, diathermic appliances, or other electrical apparatuses of a possible sparking potential are being used. In some localities cyclopropane-oxygen anesthesia is banned for these latter-type cases, yet often in the same center the anesthetist will go blissfully ahead administering nitrous oxide-oxygen-ether or ethylene-oxygen-ether, which combinations are equally flammable and explosive, without hesitation. The rationality of this cannot be explained or defended. In the final analysis, the matter of flammability and explosion hazard must be decided by the experience, by the thoughtful care, and by the matured judgment of the anesthetist.

Cyclopropane, when undiluted with oxygen, has a characteristic odor which is not unpleasant. The gas is practically non-irritating to the nasopharynx or to the bronchial tree, in mixtures with oxygen, in concentrations of fifty per cent or less. Some few patients salivate slightly; some few feel

a bit of nausea after an inhalation or two. Preliminary narcosis with morphine and atropine, or other basal lowering of the perception threshold, largely mitigates this.

PHYSIOLOGY

Bearing in mind the extreme power of cyclopropane, its rapidity of anesthetic effect, and the fact that drastic overdosage may occur even in an excessive abundance of oxygen, still clinical evidence indicates that with understanding administration, with reasonably concentrated mixtures, and with watchful care and application, harmful effects upon the respiration, the heart, the liver, the kidneys, and the blood vascular system, especially when the body organs function within rational ranges of normalcy, all are well within the limitations set or expressed for modern surgical procedures. Certainly cyclopropane compares quite favorably with what we are accustomed to expect from other familiar and well known anesthetic agents. Overdosage of the human organism with any drug is dangerous, just as it is equally dangerous to misuse the surgeon's scalpel or the otherwise beneficent surgical suture. Mental alertness in observation of the signs and phases of the anesthesia surely is indicated.

Under cyclopropane-oxygen anesthesia the respiratory stimulation so commonly seen in the initial and lighter stages under ether is entirely absent. This particular feature is modified, however, in relation to the kind and amount of preliminary narcosis and with regard to how much carbon dioxide the anesthetist is allowing to accumulate in the closed system. Both factors depend largely upon the individual technique developed by each anesthetist. Experience must dictate. Overdosage, excessively high-concentration mixtures, or cumulative effects of cyclopropane evidence themselves (even in the presence of very pink color of the patient) by a fall in the rate of respiration and by a lessening in the tidal exchange, both evidenced quite readily by the excursions of the breathing bag. The breathing, already quiet, becomes still more quiet and still more shallow until, at last, it would cease. Up to this point, usually the circulation is well maintained. On this, practically all clinical anesthetists are agreed. Should the respiration become depressed to such extreme degree (or approaching it), the remedy is obvious. The breathing must be assisted by intermittent pressure on the chest or on the breathing bag, at the same time changing the bag mix to a lesser concentration of cyclopropane or to pure oxygen, as the indications may demand. This emergency is stressed for the neophyte so that the occasion may be avoided. An emergency anticipated is an emergency intercepted and forestalled.

With the concentrations of cyclopropane-oxygen usually employed and advised, untoward effects upon the heart and the cardio-vascular system should not occur under reasonably normal circumstances. Authorities seem to concur that percentages in oxygen or correspondingly parallel accumulative effects as of a fifty-fifty mix usually are present with the onset of cardiac irregularities. This must be watched closely and guarded against. Appropriate changes in oxygen supply immediately must be instituted. In this connection it should be worthwhile to point out that it is almost humanly impossible distinctly to separate anesthetic shock from traumatic shock while a surgical operation is in progress, excepting, perhaps, when one or other is of an extreme degree, a dire emergency occurrence. The surgeon and the anesthetist have a joint responsibility. Either can push the patient too far. Cyclopropane is distinctly not an agent which can be crowded *ad libitum*.

APPARATUS

Only a most modernly constructed or adapted gas oxygen machine should be used. The greatest flexibility in anesthetic procedures then can be attained. It is of distinct advantage to have two or three anesthetic gases available, plus oxygen, plus (if you wish) carbon dioxide, plus an efficient ether vaporizer, plus a closed-circuit or rebreathing type of soda-lime absorber which can be switched on or off at will and as the circumstances may indicate The valve arrangement has been discussed. The flow meters or metering devices must be capable of exceedingly fine and close regulation, so that rates of flow as little as 100 c.c. (25 c.c. to 50 c.c. would be still better) per minute accurately may be attained and read. These are the basic fundamentals.

ADMINISTRATION

It is admitted that there are exactly as many techniques in giving cyclopropane-oxygen anesthesia as there are anesthetists. This is as it should be. Each anesthetist must make his or her technique a part of himself or herself. Individuals vary in every reaction of observation and in ability to apply their knowledge. Patients vary, surgical conditions and remedial procedures in surgery vary, surgeons themselves vary, and local thoughts and responses to innovations vary. Again, all this is as it should be; otherwise, progress is stalemated. With the distinct recognition and the positive awareness of these circumstances, it is hoped to present simple and safe instructions for perfecting your own technique in administering cyclopropane-oxygen anesthesia.

First, take a bag filled or partly filled with oxygen. This is for a twofold purpose: (1) It gives the patient a breathing volume; (2) it oxygenates the blood stream and the tissues, and it displaces a certain amount of the inert nitrogen present in the air and already present in the bronchial tree. It must ever be kept in mind that the tidal and residual air of the lungs tends to dilute the anesthetic mixture, more noticeably early in the induction. This, depending on the patient, means a volume of non-anesthetic gas of from three liters (3,000 c.c.) on up to perhaps as much as five liters.

The factor cannot be entirely dismissed, though it seldom is mentioned in the literature and by some entirely is forgotten. Naturally the point is of greater importance in the present, small-volume, powerful, cyclopropane-oxygen anesthesia, where liters and minute fractions of liters are used, in contrast with the older types of nitrous oxide-oxygen and ethylene-oxygen anesthesias where gallons and gallons of the gases were employed.

Having the bag filled with oxygen, the face mask is applied and the patient allowed to breathe into the closed circuit. At the same time a small stream of cyclopropane is started. This initial flow will depend entirely upon how quickly the anesthetist wishes to induce the anesthesia, anywhere from 250 c.c. per minute up to 750 c.c. per minute. Watch the patient—the signs. As soon as the lid reflex is absent, the patient is in early sleep. This will take about 1½ liters of cyclopropane—a little more, a little less, depending on the patient and on the amount and kind of preliminary narcosis. If the closed circuit is without leakage, an oxygen flow at the estimated required amount (250 c.c. to 300 c.c.) now is begun, and the cyclopropane feed is set back to about 100 c.c. to 200 c.c. per minute. Watch the patient—the signs. As soon as indications are present that the desired level of maintenance in surgical anesthesia has been reached, the cyclopropane may be cut off and the oxygen rate of flow continued at the basal consumption, which will be close to the figures already given. Watch the patient—the signs. Of course, a livelier flow or a lesser flow of oxygen is supplied to the bag as the patient may require. This is self-evident. The same is true of the cyclopropane. Watch the patient—the signs. If part or all of the mixture is lost by leakage, by diffusion through the rubber, or by usage in the tissues, volume replacement must be made. This also is self-evident. It may be necessary to allow a trickle of cyclopropane (25 c.c., 50 c.c., or up to 100 c.c. per minute) to compensate for these factors, perhaps for a period of time, say six, seven, or even ten minutes. Just use common sense and reasonable judgment, remembering that, barring leakage, with a constant flow of the gas the percentage of cyclopropane will build up in the breathing bag. Watch the patient—the signs.

Those who have gained more than an initial experience with cyclopropane often like to start their inductions with the breathing bag filled with definite mixtures of cyclopropane-oxygen rather than with pure oxygen. This not only is permissible, it is good practice. Naturally, the induction will be measurably quicker—the higher the cyclopropane percentage the more rapid. Mixtures containing twenty per cent cyclopropane are, perhaps, average to start with. Some use more, others less. Should you wish to do this, the oxygen and cyclopropane meters may be set at a sustaining flow from the start. But again, watch the patient and the signs. Then govern the anesthesia accordingly.

Cyclopropane may be administered as a synergist (combined anesthesia) to other gaseous anesthetic agents being given by the closed method. Other anesthetic agents may be added to a cyclopropane-oxygen anesthesia; for example, ether.

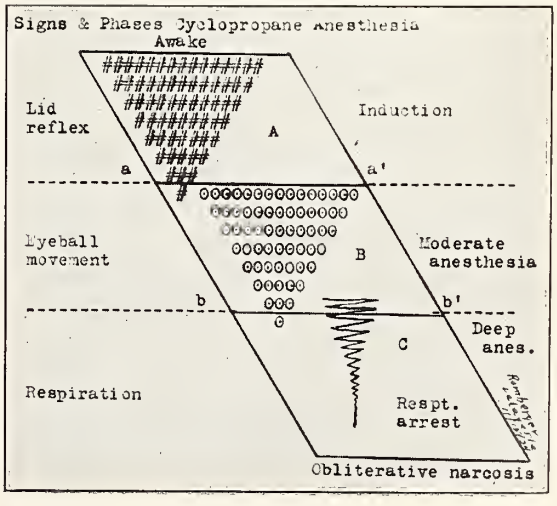
In the main, it is well not to push a cyclopropane-oxygen anesthesia to its extreme limit of possibilities. It is far better—far safer—should the occasion arise when a given cyclopropane-oxygen anesthesia is not profound enough (i.e., does not give sufficient relaxation), to add to the bag mixture a cautious minimum of ether. This may and should be done drop by drop, by surface vaporization, or by a fine bubble. Do not crowd; the pharyngeal reflexes might rebel and give trouble.

From this brief review of some of the fundamental characteristics of cyclopropane, as seen clinically, it may be appreciated that the agent is both a useful and a valuable addition to the armamentarium of the anesthetist. Unquestionably, it has proven itself to be such in many hands.

SIGNS AND PHASES

It cannot be stated too emphatically that there is no one set standard, or even imaginative percentage mixture of cyclopropane-oxygen which will produce any given plane or level or degree of surgical narcosis. This is so elementary that it seems foolish to mention it; yet, unfortunately, there are those who try to make themselves believe that so important a phase in medical procedure as is anesthesia can be practiced by the mathematician's slide-rule. No! Watch the patient. Use the signs of anesthesia as the guide to administration.

In general, the signs and symptoms evoked by varying degrees and depths of surgical anesthesia are the same, whatever the agent. However, all experienced anesthetists recognize that there are bound to be certain relative differences; i.e., in each type particular features will predominate. For example: In ether we observe largely a few salient points; with nitrous oxide-oxygen we watch others; with ethylene-oxygen we look for



still different characteristics. Yet, through them all run the silken, enmeshing threads of the same physiology. Unfortunately, during the earlier pioneer years with cyclopropane-oxygen, there seemed to exist a confusion of thought in the interpreting of the resulting signs and phases. To clarify this uncertainty, to give teachers a diagram which their students readily could grasp, and to reduce the concomitant features to their utmost useful simplicity, the graph mentioned at the opening of this thesis was evolved. First published in *The Journal of the Indiana State Medical Association*,[1] it has been reprinted in *Anesthesia and Analgesia*,[2] and is again reproduced here.

For emphasis and for completeness it is worthwhile to review a few features there discussed. The entire field of anesthesia, from a patient awake to a patient in obliterative narcosis, is covered by three simple phases: induction, moderate anesthesia, and deep anesthesia. For each of these phases there is selected as guide a separate, time-tried, clinically proved, reliable sign, each sign as old as is the history and literature of anesthesia itself, each sign tested for accuracy in many millions of anesthetic administrations, each sign basically and physiologically correct. Why three different signs? One for each phase? Because no one sign available runs through characteristically from top to bottom! Certainly neither the respiration nor the pupil! Excepting in the very deepest anesthesia, these are inconclusive guides.

The originality of concept resides not in providing new signs, but rather in the novelty of their selection and arrangement, in the simplicity and certainty of their adaptation, and in the faithful exactness with which they occur clinically.

During induction, watch the activity of the lid reflex. When it slows to the point of absence, pain sensation disappears and early (light) anesthesia begins. Now, watch the eyeball. As its oscillation becomes less and less, to the point of cessation, central fixation, really deep anesthesia begins.

These two signs having served their purpose and being no longer available, the pupil being out of the picture because of variability of response in contraction and relaxation by the iris, it now becomes necessary to observe the respiration as the patient becomes still more deeply anesthetized. Watch the respiratory rate and the tidal amplitude. It may be questioned whether the average anesthetist possesses sufficient acuteness of perception to distinguish between respiratory movements purely and solely diaphragmatic and those of the intercostal, pectoralis, and other accessory respiratory muscles. But the rate and volume always are before the eyes in the excursions of the breathing bag. In the deeper anesthesias, the respiration, regular and machine-like in its rhythmicity though it usually remains, becomes quite shallow, and it continues to become more shallow and less frequent until it finally ceases. At this point, under a proper technique, the patient is still very pink, and the pulse usually is unaffected. Respiratory paralysis occurs from an overwhelming effect of the anesthetic agent an appreciably measurable length of time before obliterative narcosis is reached. On lessening the cyclopropane percentage (increasing the oxygen supply) and with slight help by pressure on the breathing bag, respiration spontaneously is resumed.

Naturally every experienced anesthetist must and will recognize that these phases blend into each other.

In brief, the effect of the preliminary narcotics (morphine and the basal nonvolatile agents) is to contract or flatten out each field appreciably and to have the phases blend into each other more quickly; i.e., the patient is surgically asleep markedly sooner, and the respiratory arrest comes on dramatically earlier.

FILTER

Keep in mind that there is no cyanosis with cyclopropane-oxygen. Under no circumstances should this be permitted. Consequently, since many have used the degree of cyanosis as an index of anoxemia with its probable excess of carbon dioxide, the question often is raised as to when and when not to use the soda-lime filter. Well, perhaps cyanosis is a measure of anoxemia, perhaps not. It seems likely that in some future, more enlightened age a true index may be found, because there are reasons to believe that anoxemia sometimes is present when the patient is pink, and certainly there are occasions when carbon dioxide is in excess without causing undue embarassment of the respiratory apparatus. However, until then, the rate and the amplitude of the breathing remain as our relative guides to the use of the filter. Bypass the soda-lime filter when the respiration is slow or depressed, thus accumulating carbon dioxide for stimulation; turn the anesthetic mixture through the filter when the respiration is in excess or whenever exceedingly quiet breathing is essential to some particularly delicate surgical procedure. Experience will develop judgment as to when and how much.

REMARKS

Post-operative nausea and vomiting is unpredictable in any given patient. Many factors must be considered. Cyclopropane-oxygen compares favorably with ethylene-oxygen in this regard. However, there very seldom is prolonged nausea; vomiting usually is only once or twice, rather feebly, often not remembered.

Recovery of consciousness from cyclopropane-oxygen anesthesia and complete orientation post-operatively is very prompt yet perceptibly slower than simon-pure nitrous oxide-oxygen. It is more like ethylene-oxygen with which small amounts

[2] *Anesthesia and Analgesia*. Vol. 14, No. 2 (Mar.-Apr.), pp. 65-68.

(1 or 2 drams) of ether have been blended. This is no particular disadvantage. Should it be desirable to have the patient awake immediately, it is a nice refinement in technique to switch to a complete nitrous oxide-oxygen anesthesia as early as possible toward the close of the operation. This is good practice.

No apology is necessary for combining the several well-known, time-tried anesthetic agents at our command. The result often is a better anesthesia which enables the surgeon to do more exacting work. The patient is the beneficiary. This ever should be our aim.

All anesthetists and some surgeons have their own ideas as to the amount and kind of preliminary morphine or basal narcosis. The variety of opinion extends from nothing at all on up to complete mental disorientation. Whatever you do knowingly is good; however, safety and conservatism dictate the middle ground as best. In general, with cyclopropane-oxygen, troublesome states frequently are avoidable by underdosage rather than overdosage of those narcotic agents which tend to depress the respiration. Very often the matter is one of personal preference and local circumstances.

Potency in relaxation is a matter of relativity and opinion. What one surgeon calls good, another will call only fair, while a third might designate the same degree with a short and vulgar word, lousy. Then, too, to relax the abdominal muscles of a woman who has borne many babies is quite a different matter than attempting the same end in a college football player. These probably are extremes. Again, comparisons never should be drawn between herniotomy and cholecystectomy. Still further, certain intra-abdominal conditions entirely preclude the possibility of really good relaxation. However, to be entirely fair, frank, and honest, from an experience of many thousands of anesthesias, as concerns the common inhalation anesthetics, deep ether gives the best relaxation, cyclopropane-oxygen next, ethylene-oxygen next, and nitrous oxide-oxygen least. By various combinations, however, any degree desired may be obtained, usually with entire safety.

The very speed and power of cyclopropane-oxygen warns of its potential dangers; yet, like the surgeon's scalpel, it can be tamed and put to useful, humanitarian work. Properly admixed with excess oxygen, it commends itself in particular in chest surgery, in respiratory obstructive states, in cardiacs, in anemics, and in many more common conditions. As a synergist to other anesthetic agents, a little goes a long way in potentiation.

In concluding, let it be stressed and emphasized that no mere outline of technique, however detailed, ever can be more than the first steps for beginners' feet. Knowledge leads toward practice. Practice promotes experience. Experience begets judgment. Your patient deserves nothing less.

521 Lafayette Life Building.

CLINICAL DIAGNOSIS IN CONTRAST WITH X-RAY DIAGNOSIS*

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In the field of modern clinical diagnosis a physician is not limited to what he may learn with his special senses. Proven laboratory methods present facts which are not dependent on personal judgment.

From this subject, you perhaps get the impression that an x-ray diagnosis is an entity that is separate, distinct, and even comparable to a clinical diagnosis. If there are any physicians who believe that, I want to make it perfectly clear that the term "x-ray diagnosis" is used only as a clinical summary of diagnostic facts obtained with the aid of the roentgen ray.

Roentgenology as an aid to diagnosis is of value in direct ratio to the physician's knowledge of the roentgenologic appearance of normal and pathological anatomical structures and normal and abnormal physiology. A first-year medical student may recognize a simple fracture in a long bone, but that is quite different than making a diagnosis of primary carcinoma of the lung after an x-ray study of the chest.

I will discuss the ordinary or routine type of x-ray work in order to point out some of the proven and accepted advantages to the practice of medicine.

BONES

Many patients are injured and must be treated by the general physician. The course of treatment may depend upon whether there is or is not a fracture. A proper x-ray examination leaves no doubt. Serial films made after a fracture has been reduced and fixation established is the best insurance against a bad result.

Practically all courts have held that it is adequate grounds for a malpractice suit to diagnose and treat fractures per se without x-ray examination. The court is also concerned with the quality of the examination and its value in the clinical handling of the case. There is now pending in the appellate court in Indiana a review of an award of $8,000 given by the county court, after two trials, to a patient with a fractured hip, against a group of physicians who gave emergency treatment following an automobile accident. A weak point in the defense of this case was the fact that the film was not properly processed and had deteriorated to such an extent that it could not be introduced as evidence.

Growing and joint pains and so-called rheumatism are seen in an entirely different light when an x-ray of the painful part shows the presence of a bone tumor or osteomyelitis.

* Presented before the Section on Medicine of the Indiana State Medical Association at the South Bend session, October 7, 1936.

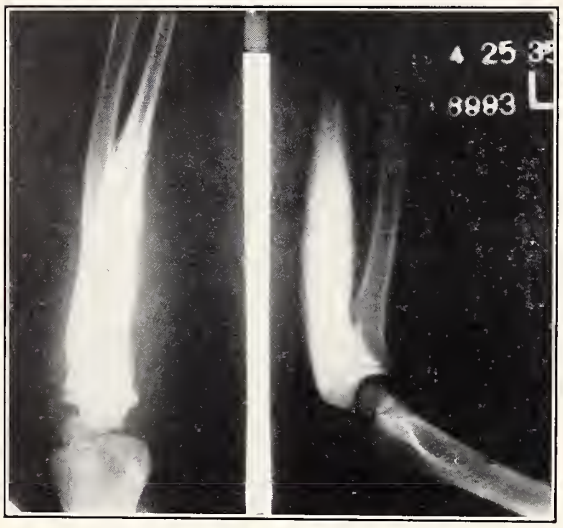


Figure 1.

Case No. 1: April 25, 1935—Boy, age 9, referred for x-ray examination of left elbow.

CLINICAL DIAGNOSIS: Questionable fracture.

PHYSICAL EXAMINATION: Boy, perfect physical specimen. Elbow and proximal forearm swollen; no discoloration; very painful, limited motion.

HISTORY: Arm painful at intervals since March 10, 1935, when he was injured by a fall while roller skating. The pain has been intolerable and the swelling marked since April 22 when he again fell on the elbow. Codeine was required for pain.

X-RAY DIAGNOSIS: Ewing's tumor of the ulna.

TREATMENT: Mid-arm amputation with pre and post operative high voltage x-ray therapy. Recurrence developed in January, 1936, in skull, right femur, lumbar spine and pelvis. All pain from primary and metastatic growth relieved by irradiation. Patient died July 7, 1936.

CHEST DIAGNOSIS

The classical tuberculous contact patient, with malaise, afternoon elevation of temperature, loss of weight, hacking cough with blood spitting, is sent for roentgen ray study. With these symptoms the family grandmother would recognize "hasty consumption." The roentgenologist can accurately give the extent, location and type of tuberculous involvement, facts which are necessary in selecting one of the newer methods of treatment. It is now an indisputable fact, established in institutions where all methods are used, that *good x-ray films will show early tuberculosis before there are any clinical signs of the disease.*

Case No. 2: June 22, 1934—College Co-ed—Age 23 —Referred for chest x-ray.

CLINICAL DIAGNOSIS: Lung infection following tonsillectomy.

HISTORY: Frequent head colds; occasional attacks of tonsillitis; pain in shoulders and elbows 6 months duration. Tonsillectomy May 15, 1934; ether anesthetic. Extreme weakness and slight cough developed after operation which was thought to be due to severe hemorrhage occurring 6 hours after operation.

X-RAY DIAGNOSIS: Acute broncho-pneumonic tuberculosis superimposed on chronic apical involvement with cavity formation.

TREATMENT: Complete bed rest 18 months. Past month has been up for meals and toilet. Clinically well. Weight gain from 106 to 134 lbs. There is still roentgen evidence of unabsorped pathology.

Roentgenology of the chest has proved that a large proportion of the cases of pulmonary tuberculosis are far advanced when there are sufficient symptoms to cause the patient to seek medical service.

Case No. 3: October 22, 1932—Merchant—Age 40 —Referred for x-ray of chest.

CLINICAL DIAGNOSIS: Nervous breakdown.

HISTORY: Only illness of any severity was influenza while in the army in France in 1918; had long convalescence. Owned five and ten-cent-store—worked long hours. Gradual loss of weight with increasing nervousness 1925 to 1932. Examined by two different doctors each making a diagnosis of nervous breakdown. No pulmonary symptoms; marked loss of strength; advised by physician to play golf.

PHYSICAL EXAMINATION: Temperature normal; BP 110/60; Pulse 90; moderate anemia. Chest examined—no definite findings. Heart normal; urine normal.

X-RAY DIAGNOSIS: Far advanced pulmonary tuberculosis, bilateral.

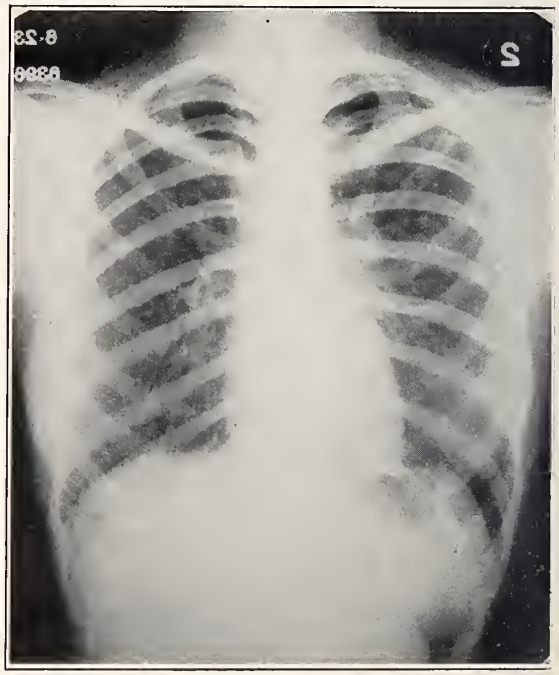


Figure 2.

TREATMENT: Symptomatic. Refused to leave business: gradual decline: died in August, 1934.

Serial film or fluoroscopic study of patients being treated by artificial pneumothorax are the only methods of accurately visualizing the amount and location of the collapse.

The filling of a group of primary lobules in a lung with an inflammatory exudate does not produce pain, and with so small an area there are not apt to be constitutional symptoms, yet this is the beginning of tuberculosis and may be detected on x-ray films.

In acute diseases of the lungs such as pneumonia, atelectasis or pulmonary infarction, an entire lobe may be involved and by clinical methods localization is impossible. With a lung abscess or an empyema, localized pain is not present except when bronchi and pleura having sensory nerves are involved. X-ray films may be made in each of two planes, with the patient in a standing and also a prone position; localization of the pathology is thus reduced to mathematical accuracy.

A patient may have a severe pain in the chest, and that side be hyperresonant, with no breath sounds, or accentuated breath sounds reaching the ear; one would suspect spontaneous collapse; an x-ray examination will remove all doubt.

Case No. 4: September 13, 1933 — Farmer — Age 67—Referred for x-ray study of G. I. Tract and Gall-Bladder.

CLINICAL DIAGNOSIS: Upper right quadrant pathology; exact nature undetermined.

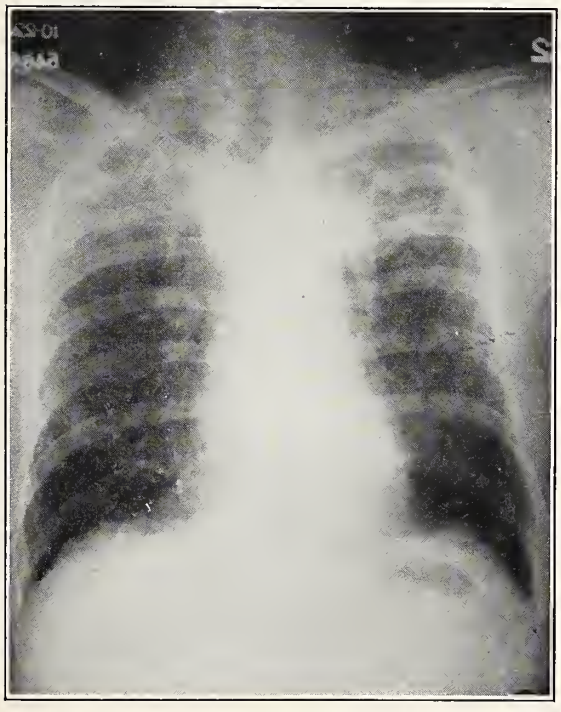


Figure 3.



Figure 4.

HISTORY: Intermittent indigestion and pain upper abdomen since 1920. Last 3 months pain had become intolerable, he had lost 10 pounds in weight, due, he thought, to his poor appetite. No nausea or vomiting. Bowels regular.

X-RAY DIAGNOSIS: Routine fluoroscopy of chest showed massive pathology in right lung—primary malignancy. G. I. tract negative; gall-bladder non-functioning with stones.

TREATMENT: Symptomatic. Died within a year.

The postoperative patient may have a non-resonant lung, an elevation of temperature, an anoxemia, accentuated breath sounds or none at all; suspected diagnosis may be pneumonia or atelectasis. The treatment of the two conditions is radically different. A bedside x-ray examination will furnish the differential diagnostic data.

INTERNAL MEDICINE

In internal medicine the consultant must know; consequently, the teeth and sinuses are x-rayed for symptomless infection; a film of the chest will disclose any silent pathology; a single film of the abdomen may supply a differential point between a urinary tract stone, and disease of the spine. Certainly the patient with recurrent gallstone or kidney stone colic is examined with the x-ray for confirmation of stones and a determination of associated pathology. The patient who has chronic indigestion, vomiting and gastric hemorrhage; or increasing constipation with blood in the stools, can usually be given an accurate diagnosis with x-ray examination without further delay.



Figure 5.

Case No. 5: February 12, 1931—Physician—Age 47—Referred for gastro-intestinal study.

CLINICAL DIAGNOSIS: Chronic indigestion; worse past 2 months.

HISTORY: Always had to watch diet; had taken soda most of his adult life. Always thin; no recent loss of weight. Lately had a sensation that his stomach was not emptying properly.

X-RAY DIAGNOSIS: Gastric malignancy.

SURGICAL DIAGNOSIS: Inoperable carcinoma of the stomach with metastasis in the liver.
Patient died 4 months later.

Case No. 6: December 7, 1934—Housewife—Age 60—Referred for x-ray examination of colon.

CLINICAL DIAGNOSIS: Hemorrhoids.

HISTORY: Rectal trouble for several years. One year ago began to have frequency of defecation with pain through lower abdomen. Stools gradually became "pencil like" and there were traces of red blood. Loss of weight 20 pounds. One sister died of cancer of rectum; father died of cancer of throat. The family physician had treated this patient one year for hemorrhoids.

X-RAY DIAGNOSIS: Organic obstruction, distal part of the sidmoid; probably malignant.

TREATMENT: Surgical resection with end to end anastomosis. Uneventful recovery. Post-operative deep x-ray therapy.

PATHOLOGICAL DIAGNOSIS: Adeno-carcinoma grade II.
Patient is living and enjoying the best of health.

In heart disease the cardiologist wants a 7-foot film for size, shape and location of the heart and great vessels, or an associated pulmonary condition, and fluoroscopic study for abnormal pulsations, rhythm irregularities or posterior mediastinal pathology.

SINUS DISEASE

In oto-laryngology the roentgen ray is employed routinely in the examination and surgery of the nasal accessory sinuses and mastoids.

A patient may have extensive polypoid hyperplasia with partially blocked drainage of the nasal sinuses over a long period of time and yet have no local symptoms. This condition constitutes a focus of infection which is the cause of such systemic manifestations as nervousness, chronic cough, dyspepsia, constipation, painful muscles and joints, and many others.

Case No. 7: October 22, 1935 — Housewife — Age 36—Referred for sinus x-ray.

CLINICAL DIAGNOSIS: Subacute arthritis left wrist; duration 5 years; cause undetermined.

PHYSICAL EXAMINATION: Wrist swollen; limited painful motion.

HISTORY: Severe polyarthritis with suppurative left knee, 1931. In a sanatorium and a hospital 12 weeks. Head colds with sense of fullness in nose past 5 years; three physicians had not investigated this complaint. Transillumination by present general and E. N. T. physicians was negative.

X-RAY DIAGNOSIS: Polypoid hyperplasia, left antrum.



Figure 6.



Figure 7.

TREATMENT: Radical surgery November, 1935, confirmed x-ray diagnosis and was followed by complete relief of arthritic pain with restoration of function.

Case No. 8: October 25, 1934—Dentist—Age 34—Referred at regular intervals since 1932 for x-ray checkup.

CLINICAL DIAGNOSIS: Recurrent duodenal ulcer.

HISTORY: Submucous resection 1918; severe stomach trouble with pain, vomiting and loss of weight from 1931 to 1932. Diagnosed clinically and by x-ray as duodenal ulcer. Relieved by diet and alkaline powder only to recur with each severe head cold. These came frequently and never entirely cleared up; better in summer than in winter. At time of this examination patient was despondent, discouraged and blue because of severe head cold with marked gastric symptoms.

X-RAY DIAGNOSIS: Duodenal ulcer not found; polypoid hyperplasia all nasal sinuses.

TREATMENT: Radical surgery both antra, November, 1934; this has resulted in marked physical and mental improvement with no return of ulcer symptoms.



Figure 8.

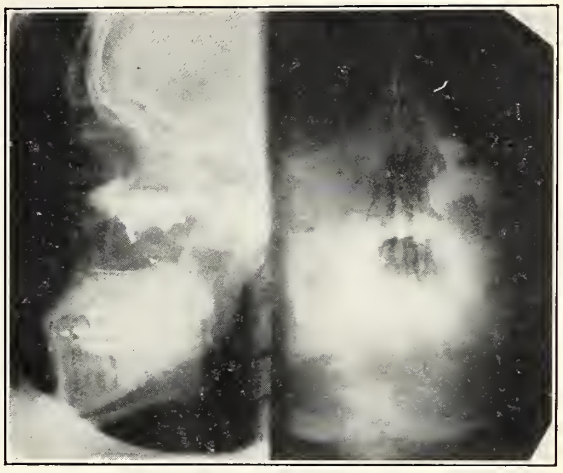


Figure 9.

Case No. 9: November 18, 1935—Housewife and bookkeeper—Age 27—Referred for chest x-ray.

CLINICAL DIAGNOSIS: Early tuberculosis or mild hyperthyroidism?

HISTORY: Extremely nervous for several weeks; melancholic, did not sleep well, had very little appetite. Indefinite history of head colds and chest symptoms since 1929.

PHYSICAL EXAMINATION: Temp. 99.4: BP 130/84: Tb fixation test negative: Wassermann negative: Urine showed faint trace albumen: white blood cells 11,800: BMR —8. Few rales right apex. Sinuses clear on transillumination.

X-RAY DIAGNOSIS: Chronic bronchial infection. Routine fluoroscopy of maxillary sinuses showed loss of aeration right side. Films before and after lipiodol injection showed extensive inflammatory changes both antra.

TREATMENT: Radical bilateral antra operation, December 21, 1935.

PRESENT CONDITION: Complete recovery systemic manifestations.

The patient with a backache is a frequent and trying problem to attending physicians. Adequate x-ray study will definitely rule out organic bone or joint disease and will disclose such causative conditions as focal infection resulting from an alveolar abscess, a misplaced chronic appendix, a suppurative sinus, an infected gall-bladder, pus in the pleural space, an aortic aneurysm, or a urinary tract stone.

Case No. 10: December 1, 1935—Housewife—Age 37—Referred for x-ray of spine and pelvis.

CLINICAL DIAGNOSIS: Undetermined.

PHYSICAL EXAMINATION: Well nourished white female with painful limited motion of cervical and lumbar spine and both hips.

HISTORY: Amputation left breast 1931; pathologist reported negative for cancer cells. Well

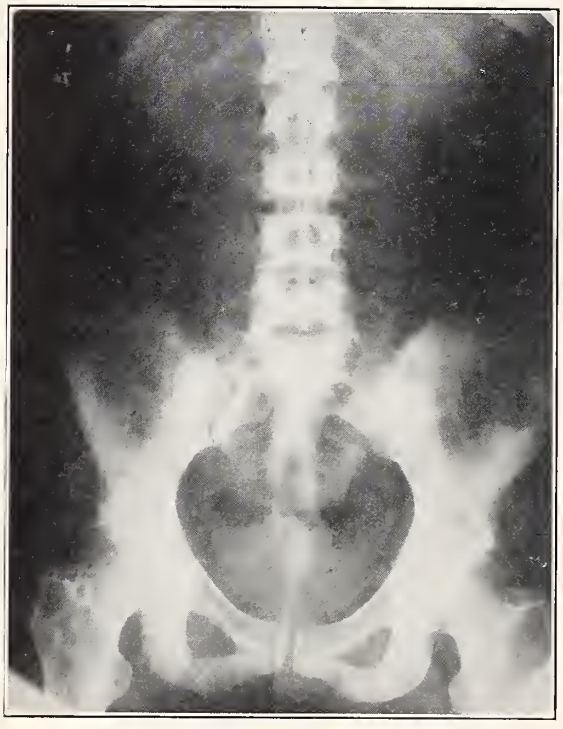


Figure 10.

until January, 1935, began to "feel tired." X-ray studies (nature not known) in June, 1935, negative. Appendectomy and uterine suspension July, 1935, with no improvement. Patient has much pain at night and walks with a shuffling gait.

X-RAY DIAGNOSIS: Malignant metastasis 3rd and 6th cervical vertebræ, several ribs and entire pelvis.

TREATMENT: Palliative deep therapy x-ray. Patient died within a year.

This discussion would be incomplete without a few words as to why the roentgenologic examinations are accurate in depicting disease. With the fluoroscope we are able to see and study the physiological action of organs inside the body. It probably will not be long until motion pictures will give us films for preservation and more careful analysis of these pulsations and peristaltic movements. An x-ray film is an authentic shadow reproduction of normal and diseased structures. It is a permanent record, cannot be changed, and with the same technical factors an exact duplicate may be produced. The variable factor in this phase of diagnosis is the human one. Physicians differing in interpretation cannot change the permanent record. It is the same today, tomorrow and a year from today. One or a hundred physicians may view this film at the same time and all be shown the same thing.

Let us consider chest diagnosis; there has been no method devised for making permanent records of vibrations caused by sounds within the chest cavity. Yet on these vibrations depend auscultation, tactile and vocal fremitus and resonance. Do you think that one hundred doctors could examine the same chest and hear and feel the same thing, and get the same percussion notes? On the mere presence or absence of rales I have observed a difference of opinion among physicians who specialize in chest diagnosis. Since a permanent record of their auditory perceptions is impossible, how are they to judge as to who is correct?

Without doubt, pain is the dominant factor which causes patients to seek medical service and may be valuable to the physician in the localization of the disease responsible for the symptom. It is one of the body's greatest defense mechanisms. In the mucous surfaces of the nasal accessory sinuses, lungs, gastro-intestinal and genito-urinary tracts, there are few sensory nerves. Hence in disease conditions affecting these surfaces localized pain is not a frequent or reliable symptom. For this reason, unless function is disturbed or other organs become involved, pathology of these organs is well established before the doctor sees the patient.

The praetiee of radiology has not advaneed as rapidly as the seienee of radiology. Improper x-ray technique produces films of worthless photographic quality, from which an interpretation should not be attempted. Mistaken diagnoses have been made from such films. This has instilled doubt in the minds of the patient and physician as to the value of the method. With modern equipment poor films are inexcusable, and even in the smaller communities where a physician owns and operates his own plant, if he will take the time he should be able to make diagnostic films in routine examinations.

Those pathological conditions so readily and accurately studied by x-ray examination with a minimum of time, and no pain or danger to the life of the patient, are frequently not seen by the roentgenologist in the curable stage of the disease, because of the necessity for economy. For many patients this is false economy as will be recognized in some of the case reports.

With the full knowledge of a diagnostic problem, the roentgenologist can advise against unnecessary examinations, change an existing request so that it will give greater information, or suggest other examinations that would aid in the solution of the problem and not increase the total expense.

DISCUSSION

B. E. ELLIS, M.D., Indianapolis: There is no branch of medicine in which expert technic and interpretation of films are more important than in the field of otolaryngology. In order to get the most information from x-ray studies of the sinuses and mastoids the otologist should be familiar with the technic of the roentgenologist so that misinterpretation of the films may be avoided. Unusual positions and poorly made films are misleading rather than enlightening to the otologist. It is not unusual to have the patient bring into one's office films which have been made by an amateur roentgenologist and frequently the patient ex-

pects us to diagnose his case completely from such films. Everyone knows that such films are entirely worthless and the surgeon should not base his opinion on such evidence.

It is most important that the otolaryngologist be able to interpret his own films and combine with his own interpretation his clinical findings. It is certainly a mistake to take the roentgenologist's report alone as a final diagnosis in otolaryngology. Many factors must enter into making a diagnosis in sinus cases, mastoids and other fields of otolaryngology. For example, the films of an acute mastoid infection are usually a very definite help in the formation of an opinion, but on the other hand, if the mastoid is a chronic one and the roentgenologist reports sclerosis, as is the case in most all chronic infections of this type, it is then the job of the surgeon to combine this finding with other clinical findings and symptoms, such as the presence of cholesteatoma, granulations in the middle ear, dizziness, pain, etc. It will be seen that in one case the x-ray will be a very positive finding while in the latter case the x-ray report is merely a small factor in the formation of an opinion. Another condition in which x-ray is a very positive guide is in furunculosis of the ear canal. Certain cases involving the periosteum over the mastoid process simulate a mastoiditis a great deal. Only x-rays will give a reliable answer to the question, because it is not uncommon to find both furunculosis and mastoiditis in the same patient.

X-rays of the sinuses, I believe, require greater care in interpretation and even more cooperation between the roentgenologist and the otolaryngologist than x-rays of the mastoids. There are so many secondary shadows in sinus plates and such a possibility of other conditions producing shadows and changes in the mucous membranes that it requires considerable ingenuity to decide what is the best procedure in many cases. Lipiodol has been a substantial help in locating pathology in the maxillary sinuses and even in the ethmoids and sphenoids. This, of course, is used in chronic cases to determine the presence of new growths or the presence of thickened membrane within these sinuses. However, the x-ray findings of a thickened membrane in one of these sinuses, even with the use of lipiodol, does not mean that it is necessarily an operative case or that there is extensive pathology in those sinuses. In case the patient is an allergic one, we may find that on one occasion the roentgenologist would give a report of thickened membrane, while again the same sinus might show practically negative findings in a few days or weeks, so that it is necessary for the roentgenologist and the otolaryngologist both to understand all factors in such a case to draw reliable conclusions from the plates. Lipiodol is further used in the diagnosing of the course of ducts and sinuses and, of course, in the field of bronchoscopy, particularly in the diagnosing of bronchiectasis and lung abscesses. It was not within the scope of this paper, however, to deal with these chest conditions.

X-ray, of course, is indispensable in the diagnosing of fractures of the sinuses and cranium in general. The use of good x-ray films is certainly not taken advantage of as often as it should be by physicians in diagnosing sinus and ear conditions. So often the physician expects localized pain and discharge to indicate the location of any sinus trouble. It is too often believed that the patient must have severe pain in his cheek bone and a large amount of discharge from the nostril in order to have a maxillary sinus on the corresponding side. This, of course, is not true. In the acute case the most frequent complaint by the patient is not severe localized pain but, as he says, a cold which he is unable to get rid of and a generalized feeling of discomfort in his head. The more chronic hyperplastic conditions frequently give very little localized symptoms. It is these cases in which the x-rays are of most value.

Just recently I saw a patient with great reduction and distortion of his visual fields who was greatly surprised when he was told he had an extensive sinusitis. X-rays of this man's sinuses showed a pansinusitis with a hyperplasia and loss of aeration in practically all of the sinuses and these findings were verified at operation. X-rays are also of great value in the patient having a chronic cough. Not infrequently the x-ray is the deciding factor in determining whether such a cough has its origin in the sinuses or in the chest. Some time ago a man in my office told me that he was beginning on his thirteenth bottle of cough syrup in his efforts to cure a persistent cough; both antrums were found to be full of pus and a few washings cured this man's cough. Within the same week a young woman came in complaining of a persistent cough. She had had long continued nasal treatments without results. X-rays of her chest revealed a large tuberculous cavity and the sputum was positive for tuberculosis. The x-ray in both cases was a very useful factor in making these diagnoses.

LYMAN R. PEARSON, M. D. (Indianapolis): Dr. Stayton has given us a very splendid presentation, not only from the standpoint of the roentgenologist but from the standpoint of the medical man as to the value of x-rays. The application and correlation of x-ray findings with physical findings and the history is a problem that meets every practitioner. There has been each year some improvement in the technic and interpretation of x-ray films and this results in a great help to the medical man. We must, however, realize that there are some errors in interpretation and this tends to modify the help given.

Several different problems present themselves to the average medical man. First, we have the situation where the x-ray is taken by poor equipment or by improper use of good equipment, and this gives bad results. As to good films with poor

interpretation, we all know that it is possible to have perfect instruments and films and good development and still have poor interpretation, and that leads to much trouble.

I have one case in mind where a man was at work and a heavy object fell on his foot. He was sent to a hospital and a diagnosis made of a fractured navicular bone. This was splinted and he was taken away from work for three weeks and kept at home. Then a check-up x-ray was taken and by careful examination it was discovered that it was not a fracture of the navicular bone but of an extratarsal bone. This patient lost his work and his company was put out of three weeks work at a great expense, because of the failure of proper interpretation.

I imagine most of you have had the experience of having a gallbladder film where definite stones were found; these patients are often subjected to surgery and stones not found. That occurs in our practice frequently and is not always the fault of the roentgenologist. We may have perfectly good films but limitations as to their ability to show things.

I have had two cases in the last three months that have been brought up for study. Each gave a history and complained of signs and symptoms of gastric ulcer. One had had fluoroscopic study and films, and the other had had three x-ray studies in the last six months, all of which were negative. With the help of a couple of men who have been experimenting with gastroscopy, these patients were submitted to it and in one case three small ulcers were found, the largest the size of the thumbnail and the other two somewhat smaller. The second patient had an ulcer the size of a bean next to the pylorus. Both had had careful x-ray study and nothing had been found.

The same thing is true of gallbladder infection and gall stones and other conditions where pathology may fail to show up on an original x-ray and later we may have positive findings. This is due to the limitations of x-ray; it is not due to poor equipment and not due to misinterpretations.

Then we have the good x-ray films with no limitations but good interpretations.

In regard to tuberculosis, Brown of Saranac says that in 25 per cent of cases the x-ray is positive of findings of tuberculosis when it is absolutely impossible to tell by clinical findings. Another author reports 500 cases who have shown cavity formation in tuberculosis as shown by x-ray; of these cases only 5 per cent had any positive physical findings. Another author has reported twenty-two cases of spontaneous pneumothorax in which only two of the cases had been diagnosed before x-ray was taken; that is not a very good percentage.

X-ray is of the greatest help in the diagnosis of these conditions. We had a good example this morning in the talk on pneumonia. It is very valuable in that condition and in the prognosis and treatment. I had a patient who had been sick one day but I did not like his appearance; he had a temperature of 104 degrees. X-rays were taken and showed a complete consolidation of the upper lobe of the right lung. In twenty-four hours the temperature was normal. We might have allowed him to be up and around if we had not taken the x-ray. The x-ray modifies treatment to a great extent. I had another case which I saw about a year ago, a girl who had been observed for irregular temperature for a week or ten days, the temperature running as high as 103-104 at times. Two doctors had seen her and were unable to make a definite diagnosis. She was sent into Indianapolis where we examined her and could find nothing from the clinical standpoint; the chest showed no dullness, no rales, no variance in breath sounds; temperature was 102-104; blood culture negative, blood Widal and agglutination tests negative; white blood cells about 6,000. There was nothing of any importance there. As a final resort, an x-ray was taken and we found complete consolidation of two lobes on the right side, so we can say that in these cases the x-ray is of great help. We must modify our interpretations of it to a certain extent, but I would urge that we all use it freely in the diagnosis of disease in a way that will help us to correlate the physical findings and history to get a proper and accurate diagnosis.

ABSTRACT

VENEREAL DISEASE CONTROL PROGRAM IN KANSAS

In accordance with state laws, syphilis and gonorrhea were made notifiable diseases at the quarterly meeting of the Kansas State Board of Health in January, 1914. EARLE G. BROWN, Topeka, Kan. (*Journal A. M. A.*, March 6, 1937), discusses the effect of the program on the incidence of venereal disease and summarizes its work from 1914 to 1935 in order that comparison may be made with the proposed program of the future. As a result of funds allotted to the Kansas State Board of Health by the United States Public Health Service under the provisions of the Social Security Act, a program is in process of development with a full-time director in charge. Dr. Wenger, following his trip to Kansas, made the following recommendations: 1. Free serologic service to all physicians by increasing the laboratory staff. 2. The addition of medical and social personnel at the three clinics; also additional equipment if needed. 3. Free neoarsphenamine and heavy metals to physicians for indigent patients. 4. Standard medical record for use in all three clinics. 5. The use of the U. S. Public Health Service classification for syphilis in all clinics to assure better material for study. 6. That an educational program for physicians be started so that they will report their venereal disease cases. 7. When more full-time health units are established throughout the state, that the venereal disease program be included. Thus the new venereal disease program is under way. There is a renewed interest in the problem of syphilis and gonorrhea, not only among professional groups, but among the lay groups. Within the past month each of the two newspapers in Topeka printed articles in regard to venereal disease, as compared with the previous custom of referring to them as "social diseases." It is hoped that additional treatment facilities may be provided through the development of full-time county or district health departments. There are certain areas in the state where it is considered that this would be especially advantageous.

IDEALS IN MEDICINE*

E. E. LONG, M.D.
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To be successful in any endeavor it is necessary to have a clear idea of the object toward which we strive. The ideal to be attained in medicine is that of fullest service to our fellow man. This service is manifested by an attempt to prevent and if possible to cure disease. While this is our chief object, much time will be spent in the more humanitarian side of medicine, the relief of the suffering and improvement of impaired health. While this is our primary aim, we should not overlook the fact that we are evangels of the medical profession, and our lives should be so lived that our endeavors shall reflect renown upon that high calling which we represent. We enter a noble heritage, made so by no efforts of our own, but by the generations of men who have unselfishly sought to do the best they could for suffering mankind. Much has been done; much remains to be done. A way has been opened, and to the possibilities in the scientific development of medicine there seems to be no limit. Today no other art occupies such a high plane in the public esteem, and the power wielded by the influence of this profession cannot be estimated. Not only in the sick room, but in the planning of industrial cities and even in the movement of armies and the assembling of navies, the presence and advice of the physician are required.

The ideals of any profession are vested in the representatives of that profession; therefore, it behooves us to have as members of the medical profession men who are endowed with those natural qualifications; men who have received proper training; men with nobleness of character, in whom the reputation of medicine can be safely reposed. A physician worthy of representing the true ideals of medicine should be suited both in character and in conscience for the honor of the medical doctorate. The doctor belongs to that great army of silent workers among whom are physicians and priests, sisters and nurses and social service workers, to whom are given the ministry of relieving suffering, consoling the sorrowing and providing for the needy. This sense of duty toward the patient is the first requisite for a doctor and this sense can arise only from a positive and innate altruism.

The physician should have such a sacrificial love for humanity that he will ever in his daily life show tenderness and consideration for the weak, and at all times be conscientious and sincere. Appreciation, responsiveness, good temper, mental poise, frugality, dignity, faith—these are virtues he should acquire. He should radiate cheerfulness and courage, thereby inspiring both admiration and confidence in the hearts of his patients. There must be no personal sensitiveness or lack of interest in details; he must apply his knowledge wisely and tactfully; he must never be overbearing or egotistical. He should know himself and recognize his limitations. Above all other things, a doctor should be good in the sense of possessing good moral qualifications. He should be a man of religious convictions, living a life unspotted from the world.

A good physician is an educated physician. He must give diligent attention to all branches of learning. If the physician is to take his proper place as a leader in the community, he should be able to cope with the most intellectual inhabitants, and this he will be unable to do if he has not at least a superficial knowledge of those broadening subjects. Medical education should represent an organized attempt to train men to apply scientific methods to the prevention, alleviation or cure of disease and to the advancement of medical knowledge.

Another fact to be sought by the physician after graduation is the proper understanding of his duties to his fellow man. He must keep abreast of the times; he must keep in touch with the latest results of research and experiment, and he should periodically refresh his knowledge and perfect his technique by attendance upon lectures and clinics. He likewise should be engaged, as far as he is capable, in a certain amount of experimental research, which must be based upon feeling, reason and experience. At the same time he should not lose sight of the patient. Therefore, if we can have physicians who are keeping abreast of the times, who are not mentally lazy, and who are using their best interests for the patient's welfare, we shall have attained another height in the realm of medicine.

An honorable physician must be an ethical physician. He must be generous in his praise for brothers in his profession, and not be guilty of unjust criticism of their methods. He should be ethical in all respects and never attempt to inveigle the patients of his fellow practitioner for his own material benefit. That happy medium can be reached whereby a doctor may increase his own practice and still not encroach on the territory of his neighbor. Physicians should be brothers in the fullest sense of the word, manifesting such a brotherly love that they will always work in perfect harmony, so uniting their efforts as to strive not only to benefit themselves but the medical profession as a whole, and the public in general. It should be remembered that any glory attained at the expense of a worthy brother and which results in isolation from the medical profession is empty.

Good judgment is exemplified in the protection of the health of the people rather than in the healing of the diseased. Under the present system of the practice of medicine, doctors have a vested interest in ill health instead of a vested interest in good health, putting a premium upon disease rather than health. A truth which should be incorporated into the medical practice is the peri-

* President's address presented at the January meeting of the Daviess-Martin County Medical Society.

odic examination of every man, woman and child in the community. The examination should be complete and thorough, by physicians capable of recognizing the earliest symptoms of a potential disease. This should include the use of all the various methods of clinical and laboratory diagnosis. A healthy nation is a strong nation and the health of the people is a national problem. When this fact is known we should think of health in terms of a nation instead of an individual. No physician is doing his full duty unless he is co-operating with, and is a leader in all movements that are attempting to promote the health of the people. The duty of such movements should be to prevent disease by such methods as protecting drinking water from its source, preventing the spread of communicable disease and advising on matters of ventilation, sanitation and hygiene.

Industry should be so regulated that the working conditions will not stunt the growth or shorten the lives of its employes. The public mind should be so shaped that the community will vote to tax itself to establish hospitals and diagnostic centers to be operated by the community through and by the medical profession for the benefit of the public. The medical profession with a like co-operation with school boards and school teachers will inspect and give medical care when needed and direct the physical training of the children of the community.

The sum total of all the thought, time, energy and efforts of the medical profession can be given expression in one word—"service." As a servant of the public the physician enjoys one of the greatest of God-given privileges. If, then, service be his lot, let it be of the most approved and highest type, reaching upward to that goal of accomplishment, namely, the prevention of disease, the alleviation of human suffering, and the building up of the efficiency of our nation's man power.



Figure 1. Male infant, aged 1 year, showing soft tissue bulge in right renal area due to Wilms' tumor. Shadow of opaque medium seen in left kidney pelvis and ureter.



Figure 2. Male child, aged 8 years, showing shadows of the dye in both renal pelves, and a marked hydro-nephrosis on the left.

SUBCUTANEOUS PYELOGRAPHY IN CHILDREN

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To supplement what has already been written on the subject of subcutaneous pyelography, and to encourage the use of this procedure in proper cases, usually infants and children, is the purpose of this article.

Butzengeiger[1] in 1931, Hillebrand[2] in 1932, and Beer and Theodore[3] in 1934, have written of their

* From work done at the Department of Surgery, University of Michigan Hospital, Ann Arbor, in the summer of 1936.

[1] Butzengeiger, O.: Ausscheidungs-Pyelographie durch subkutane Abrodil-Infusion. *Roentgenpraxis* 3: 881-884 (Oct. 1), 1931.

[2] Hillebrand, H.: Ausscheidungspyelographie durch subkutane Abrodil-Infusion beims Kinds. *Zentralbladt f. Chir.*, 59: 1048 (April 23), 1934.

[3] Beer, Edwin and Theodore, Frederick: Excretory Urography After Subcutaneous Injection of Neoskiodan. *J.A.M.A.*, July 21, 1934.



Figure 3. Female child, aged 3 years, showing dye in both renal pelves and in the bladder.



Figure 4. Female child, aged 2 years, showing shadows of the dye in both renal pelves.

experiences and noted the uniform comparability of the resulting shadows on the films, between the subcutaneous and intravenous methods of administering the radiopaque medium.

In the Urology Clinic of the University of Michigan Hospital, the method of administration has been changed to the extent that the injection is given bilaterally under the skin at the angles of the scapulæ. Infiltration of the skin with local anesthesia is the first step, except in infants. One 20 c.c. ampule of Iopyracil (Diodrast) is mixed with 80 c.c. of distilled water, then 50 c.c. are injected on each side. Manual pressure is applied over the injection site to force the fluid into as broad an area as possible. Two rounded masses are seen following the injection, but the rapidity of absorption is such that these elevations disappear completely by the end of one hour when the last film is exposed.

The routine for exposing the films has been varied in an attempt to determine at what point maximum concentration and correspondingly maximum visualization was obtained in the renal pelves. There has been no constancy of this factor, the times of optimum concentration varying as they do following the intravenous injection method. It has been noted that excretion begins shortly after the injection, shadows of the dye being seen in the renal pelves and in the bladder at the end of ten minutes. A preliminary film, prior to injection, is made in each case.

Eighteen patients have been examined by this method, the age varying from three weeks to nine years. As already reported by those previously mentioned, the results have been fully as satisfactory as those obtained by the intravenous method. In two other cases both methods were used, and no difference was found in the detail or density of the shadows from the diagnostic standpoint, both being satisfactory. One case, the youngest of the group, showed no visualization of any portion of the urinary tract. The remainder showed diagnostic shadows on at least one film of the series of three, made at intervals of 10 or 15, 30, and 45 to 60 minutes following injection.

The accompanying illustrations carry no case histories, and are intended to show chiefly the density of the shadows of the dye in various cases.

SUMMARY

Where intravenous injection in infants or children is difficult or impossible, the subcutaneous injection of pyelographic medium may be relied upon as a valuable procedure.

The method, carried out with aseptic technic, is safe, and has shown no untoward reactions following the examination.

419 Hume Mansur Bldg.

LONG BONE RETRACTORS

DAVID I. SCHWARTZ, M.D.
Fort Wayne

There is no claim for originality as to the design of these retractors. It is believed that Lange of Germany was the first to employ instruments of this general configuration. Dr. George E. Bennett, of Baltimore, modified them admirably. Retractors which adequately expose and protect the operative site of the long bone and at the same time offer maximum clearance and soft tissue protection obviously are essential to good bone surgery. Needless to say, specially made surgical instruments usually are quite expensive. The average surgeon, therefore, will welcome a good, useful, special instrument at low cost, namely twenty cents, which is the price of two ordinary gardener's trowels, Figure A. By placing the distal tip of the trowel in a vise it may be comparatively easily shaped over a ¾-inch wooden dowel as noted in the illustration, Figure B. The end view and plan view as noted in the illustration, Figures C and D, show clearly the way in which adequate soft tissue clearance and protection is offered, and at the same time splendid operative site bone exposure and protection is given. The usual coating of machine oil applied after each using of the retractors will prevent any trace of rust. They will last indefinitely.

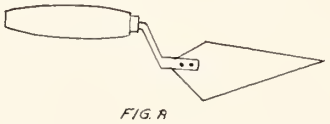


FIG. A

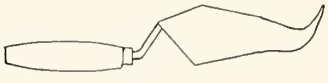


FIG B



FIG C

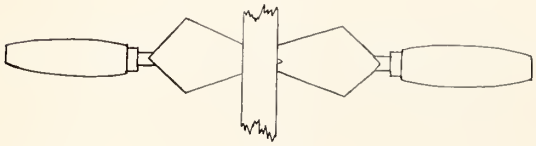


FIG D

COMMENT

The advantages are:

1. Most inexpensive.
2. Very easily procured and made.
3. Will last indefinitely.
4. Gives splendid operative site bone exposure and protection, and at the same time offers maximum degree of soft tissue clearance and protection.

326 WAYNE PHARMACAL BLDG.

ABSTRACTS

NEW YORK STATE PROGRAM FOR SYPHILIS CONTROL

In this progress report on the New York State syphilis control program, EDWARD S. GODFREY, JR., Albany, N. Y. (*Journal A. M. A.*, March 6, 1937), places emphasis on notification and the provisions of adequate diagnostic and treatment facilities. These two phases of the program must be developed first, together with facilities for returning delinquent infectious cases to treatment. By assisting the localities in which syphilis is most prevalent, namely, large cities, and by augmenting district staffs, it is hoped to raise the quality of treatment and to provide really adequate follow-up service. As time goes on, it is believed that the problem will become less complex and that case and contact investigation can be more generally and effectively carried on. As has been said on other occasions, syphilis control presents a real challenge to physicians.

TYPICAL CITY PROGRAM FOR COMBATING SYPHILIS AND GONORRHEA

CHARLES WALTER CLARKE, New York (*Journal A. M. A.*, March 6, 1937), asserts that while the details of a modern program for combating syphilis and gonorrhea will differ from city to city in accordance with the size and character of the population of each, the principles involved in the program of each should be identical, since these principles are based on accepted scientific facts. Neither educational activities nor chemical or mechanical prophylaxis have so far succeeded in reducing radically the prevalence of syphilis or gonorrhea in civilian groups, and unfortunately gonorrhea cannot be rendered noninfectious quickly and permanently by the means of treatment now generally available. This is not to say, however, that education, prophylaxis and therapy may not under favorable future conditions be effective in reducing the prevalence of gonorrhea. Syphilis, on the other hand, can be rendered temporarily noninfectious, usually with a few doses of arsphenamine, and by persistent treatment almost every patient becomes and remains noninfectious. Unlike gonorrhea, second infections with syphilis are so extremely rare as not to constitute a public health problem. If every patient with early syphilis received twenty doses of arsphenamine and forty doses of a bismuth or mercury compound properly administered, and if every syphilitic woman were treated adequately in every pregnancy, acquired and congenital syphilis would soon cease to exist. While greatest emphasis should be placed on early syphilis and on syphilis as a complication of pregnancy, almost every case of syphilis that has not been adequately treated should still be regarded as potentially infectious. With these principles in mind, the modern city program should be built up in three main divisions: (1) education, (2) case finding and (3) treatment. The necessary staff for carrying out the program for combating syphilis and gonorrhea in a city consists of an experienced and a well trained medical director assisted by physicians, nurses and clerical staff, and in larger cities by social workers, technicians, orderlies and statisticians. All members of the staff should be reasonably compensated. This, of course, includes the physicians working in the health department clinics. Voluntary service is usually unsatisfactory in one respect or another. The physicians and nurses should be specially trained or should at least be directed by specially trained supervisors. The fact should not be overlooked that local voluntary agencies such as social hygiene societies can be of great practical assistance in many aspects of this program, especially with regard to popular education, professional training and the creation of favorable public opinion.

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JUNE, 1937

EDITORIALS

THE POSTGRADUATE SESSION

One of the annual features of the activities of the Indiana State Medical Association for several years past has been the spring postgraduate course. Several plans have been tried. For a while the programs were held at various points throughout the state, but later they were held regularly in Indianapolis. The Indiana University School of Medicine also has held similar courses at the Indianapolis medical center. Each of the programs had varying degrees of success, the attendance being just high enough to justify their continuance. Last year the Association committee in charge of this feature met with University authorities in an endeavor to work out a joint program, and the meeting held in May was the result of their negotiations.

The problem of how best to present the annual postgraduate session in Indiana has been solved. That the 1937 meeting was a very successful gathering admits of no doubt. Seldom have we attended a meeting where as much interest was shown, where the true professional atmosphere abounded, and where everyone in attendance was on his toes, getting to meetings on time and staying until the session for the day had ended.

The program was of an unusually high order. We do not recall a similar program that held so many attractions for the general practitioner. Every phase of medicine was covered, and the speakers brought their messages in a language that appealed to the general men.

A registration of more than 500 (and the usual number failed to register) indicates the interest that prevailed.

While there were a number of men from outside of Indiana on the program, there were many from within our own state, each of whom contributed to the success of the affair. Two former Indiana men, both graduates of our medical school and now heads of departments in other schools, came "back home to Indiana" to tell us what is being done in other sections of the country. Each guest speaker expressed himself as being highly pleased with the large attendance and with the spirit which was manifested by the Indiana profession. Dean Gatch and Chairman Ensminger, together with the large list of committeemen who planned and worked for this venture, deserve the praise and thanks of every Indiana physician for the manner in which the program was carried out. There was not a single delay during the entire week, and the inevitable substitutions were taken care of promptly.

The medical school affords a very nearly perfect set-up for the presentation of such programs. The accommodations were ample and an efficient staff of officials and attendants contributed to the success of the meeting. The matter of having clinical material on or immediately adjacent to the campus is an additional reason for the high caliber of this meeting.

We talked with two score or more of those in attendance and each unreservedly demanded more and more of the same sort of programs and under the same arrangement. They were agreed that there is just one place for such meetings, and that place is the Indianapolis medical center. We talked with some of those in charge of the program, and they advised that in the arrangement of future programs any Indiana physician who wished to conduct a clinic would be supplied with all the clinical material he desired, and that the school and hospital authorities would place at his disposal every needed requirement. With the unprecedented success of the 1937 meeting and such assurance for future meetings, the outlook for postgraduate courses in Indiana is indeed bright.

THE VENEREAL DISEASE PROGRAM

Some six months ago the Indiana State Medical Association along with most other state medical organizations subscribed whole-heartedly to the venereal disease program as set forth by the United States Public Health Service. We have had much to say about the necessity of doing something to control a very bad situation, and have urged county medical societies to take specific action in the matter, but only a few have done so. To date we have learned of only one society that has gone into this thing with anything like a carefully worked out plan, and that is the Fort Wayne Medical Society whose activities along these lines

have been planned and executed in a manner that seems likely to insure worth while results. In another of our larger communities, South Bend, it appears that the local medical society has not been very active but that some of its members have gone into the matter with the proper spirit. At the Secretaries' Conference in March, Dr. Verne Harvey, director of the Indiana Division of Public Health, reported some of the work done by this little group. One of the first inquiries made concerned food handlers in the South Bend area. According to Dr. Harvey, some 5,000 such persons were given Wassermann tests, and ten per cent showed positive serologies. This means that 500 persons handling food in a community of 100,000 people are a source of potential danger! It is probable that several hundred people engaged in food handling were not included in this group, but the fact remains that *that same ten per cent*, the ratio suggested by the Public Health Service, holds good here.

If the secretary of the South Bend board of health were to publish a report that the city harbored even two hundred cases of smallpox, scarlet fever, or any one of several other contagious diseases, there is no doubt but that the populace would demand action of the "right now" sort. If this figure were raised from 200 to several thousand, and the ten per cent figure means just that, what a furore would be created! The local, the state and the national press would demand immediate endeavors to control the menace.

This, then, is the situation in Indiana today as it is the situation in practically every section of the United States. The venereal diseases have become so widespread that they are more than a social menace; they are more than a health menace. They have become pests of the worst sort and, therefore, demand our best attention.

Dr. Parran means it when he says that control of the venereal diseases is the primary work of the United States Public Health Service. The federal government is behind Dr. Parran. Already large appropriations have been made, and further funds will be available. This means that if we fail in our pledge to Dr. Parran, if we let the matter drop and take no further action, the federal government will take charge, and if that comes to pass, it will be taken care of in a fashion probably not to our liking.

Dr. Parran has requested, among other things, that a dark-field illumination be made available whenever a person is suspected of being luetic. So far as we know, only a few Indiana communities have provided such facilities. Those that do not have them seem not to have made it known.

There has not been a sufficient increase in the reporting of venereal diseases to indicate that physicians are becoming actively interested in this campaign. Too many physicians have failed ever to make any such reports. A person who is under treatment and fails to continue until dismissed by his physician also should be reported to the State Board of Health. Recent press reports carried the story of an instance in Iowa when a young man stopped his treatment, was apprehended, haled into court, and jailed. He was told that unless he reported for regular treatment, he would be sent to jail for a long period and treatment given there. This is an example of the type of machinery that soon will be set in motion in all parts of the country.

Uncle Sam and Dr. Parran are in earnest about this thing. We have pointed out that the whole thing is in our lap at the present moment, but if we do not act with reasonable promptness, the job will be taken out of our hands.

The Indiana State Medical Association never has fallen down on a job assigned to it. Let's tackle this thing and lick it!

THOSE TRAFFIC ACCIDENTS

The 1937 session of the Indiana legislature made what we believe was an intelligent effort to make changes in traffic regulations that would bring about a decrease in casualties in our state. However, the daily press reports are proof that such accidents are steadily increasing. During the peak of the automobile season, the Indianapolis papers carry several columns of news stories of such accidents, many of them veritable tragedies. The dailies in other large cities of the state devote considerable space to such news items, and even the country weekly has its share of the pitiful stories. In the great metropolitan centers, the dailies make great displays of such news, but all these efforts seem vain. In the Chicago area, for example, deaths and injuries from traffic accidents are markedly higher than in 1936; in the editor's home town of Hammond there has been an enormous increase in such accidents, so that Hammond once more seems to be bidding for the unpleasant notoriety of being "tops" in automotive accidents for the entire country.

None of the various schemes designed to bring about some degree of control of the traffic problem has seemed workable. The problem is far from being solved and will remain so until two major elements—law enforcement and the personal equation—are controlled. In one city there has been a decrease in traffic accidents and it is probably due to a strict and impartial enforcement of the traffic rules of that community. Only recently an official of a safety council in that community was picked up and fined for a traffic violation. Men of prominence were booked along with the garden variety of drivers. "Fixed" tickets are said to be an unknown commodity in that community at the present time.

Does the average driver ever pause to consider what a destructive monster he is maneuvering, and just how little it takes to bring on disaster? A

few days ago a friend was driving home from the eastern part of the state and went into the ditch to avoid a car which emerged suddenly from a side road. He is now in a Fort Wayne hospital where he will remain for several weeks; his automobile is a complete wreck. Yes, he knew that he had the right-of-way, but he also knew that there was a side road ahead, and that some careless driver might come onto the main highway without stopping; hence he would have done well to slacken his speed until he had passed the intersection.

Show us a community with a high motor car accident rate, plus a high insurance rate for motor cars, and we will show you a lack of respect for traffic regulations in that same community. We believe that the first step in control of this ever-increasing problem is proper traffic regulations and strict enforcement of them. Then comes the personal equation—the driver. The Indiana law regarding a driver's license is of some benefit, but the fact remains that almost any one can get one of those little cards. His application declares that he is in good health and possessed of all his faculties; a freeholder declares that the applicant is known to him and that *so far as he knows* said applicant is an all right sort of fellow and is entitled to a license—and he gets it. The maimed, the crippled, the color blind, the myopes all have their little cards, or can get them for a pittance. Known epileptics are driving automobiles on the streets and highways in Indiana and in most other states. The fool who passes other cars on hills and curves gets his little card along with respectable drivers. The careless chap with dozens of smashed fenders (on other people's cars) notched on his steering wheel is permitted to continue his perilous course. The idiot who mixes four shots and a half dozen beers with his gas, then essays a little touring, occasionally is haled into court and given a fine of five and costs, *suspended!* These are the things we read in the papers every day.

When a friend is maimed or killed in such an accident, we are shocked, but we forget it, and this faculty for forgetting is the thing that makes possible the continuances in cases in which an individual is charged with criminal carelessness in driving. In one instance, a case has been hanging fire in an Indiana court for some six months, and this is due to the fact that people soon forgot the shock which resulted from the accident.

The solution of the problem is unknown, but the American people are demanding speed and more speed; they want to go places and go quickly; they want more than express train speed, and they do not pause to remember that while trains run on fixed rails, motor cars run where the driver wills. Some sort of control of the driver seems essential.

THE COUNTY MEDICAL SOCIETY

A little paragraph in a recent report of the Executive Committee probably was overlooked by a great many of our readers. It concerned paid-up memberships as of April first. These figures showed the highest paid membership for that date in the history of the Association. From a rather intimate acquaintance with membership figures during the past several years, it is believed to be probable that the total membership for 1937 will reach the three thousand mark which will break all previous records.

Even if that record is attained, we shall not be satisfied. There are several hundred physicians in Indiana who are eligible for membership and who remain outside the fold. Occasionally we have suggested a membership campaign conducted by Association officials, but such a campaign probably would not be as effective as a campaign carried on in every county in Indiana, excepting those few which have 100 per cent membership records. In the larger cities there are numbers of physicians who, chiefly because they have not been properly approached, are not members of the local society. They can best be reached by local members.

The recruiting task should not be assigned to the society secretary alone. It should be given to a special committee. Personal calls upon more than two hundred physicians in Lake county, several years ago, resulted in bringing the membership to the highest point in the history of that county society. Soon the depression came, with the result that the high mark has not been reached again. However, with a planned membership campaign carried out by a committee, the number of members undoubtedly would rise to more than two hundred, exceeding the previous high mark. What is true in Lake county is true in almost every other county in Indiana. We believe that the effort is worth while and we recommend it to the officials in our component groups.

One thing in particular should be stressed and that is to interest the younger men, especially the interns in your local hospitals. The young men of today are the leaders of tomorrow, and this is just as true in medical organization as in any other field of endeavor. The young chap who joins today is the one to whom we must look for future leadership.

The county medical society is the basic unit of organized medicine in America. It is more than that—it is the back bone and the very life blood of all medical organizations. Without the county medical society, we could not hope to accomplish a single thing, and since this is true, it behooves us to look well to the small unit, and to see to it that it functions in the highest degree. To accomplish this, we must have every eligible man a member. Our mark once was 3,000 members; now that we seem likely to reach that score, we must set the mark higher—3,500; perhaps we cannot reach that in 1937, but certainly we can in 1938!

EDITORIAL NOTES

IF YOUR DUES ARE NOT PAID, THIS IS THE LAST ISSUE OF THE JOURNAL YOU WILL RECEIVE.

Members of the Daviess-Martin County Medical Society did a rather unusual and novel thing in celebrating May Day by having various members of the society give talks upon child health in the various churches of their community on Sunday, May 2. They covered practically every church in their community.

The Indianapolis Medical Center, especially to those who seldom get out that way, is an imposing group of buildings, and with the new clinical building well on its way, we soon shall have physical equipment possessed by only a few medical schools. If you have not visited this part of your capital city recently, do so at your next opportunity. You will be surprised at what is going on out there.

Members of the Medical Society of Pennsylvania recently were canvassed as to their attitude on compulsory health insurance. Responding to the inquiry were 3,750 members, only 76 of whom openly favored such a proposition. This vote represented about 54 per cent of the total membership and certainly indicates a healthful state of medical mind in Pennsylvania.

Considerable curiosity was aroused at the registration desk for the postgraduate course when registrants were asked their age. It would be interesting to know the average age of those in attendance. It seemed that the majority were of the younger group, which we regard as a very hopeful sign, for it shows that the younger men are up-and-coming chaps, eager to learn just what is new in the field of medicine.

Reports received indicate that the district meetings over the state are unusually well attended and that the programs are of a very high order. We always have liked these district meetings, in that they bring together medical men from various counties and an exchange of views with others than your regular confreres is good for most of us. We hear very little these days about lack of interest in these annual gatherings.

Speaking of medical meetings, have you made your reservation for the October meeting at French Lick? If not, you had better attend to it right now. We predict a record attendance for a meeting in southern Indiana. Soon you will have the program in some detail, and we know that you will agree that it is of the highest order. Mark your desk calendar now—October 4, 5, and 6—and get in on what promises to be an outstanding meeting.

A New York City physician suggests a "remedy" for the fee-splitting evil, that of a "grant" of 15 per cent of the fee paid any specialist to whom a case is referred. We learn that the Council of the New York Academy has turned thumbs down on the suggestion. Fee splitting, under any name and in any guise, is a deplorable evil and should not be countenanced. After all is said, the fact remains that the patient becomes a commodity in all such transactions.

Morris Fishbein, editor of the *Journal of the American Medical Association*, writes that he has just about recovered from a recent attack of Bell's palsy. To use his expression, "I am about 98 per cent recovered and am at my desk." He was "out of circulation" for some weeks, but was able to carry on his editorial duties at his home, thanks to a very efficient corps of assistants. He had planned to come to Indiana to address one of our district meetings but his illness forced cancellation of all speaking appointments for an indefinite period.

Hygeia, that invaluable publication of the American Medical Association for lay consumption, showed an improvement in its financial picture in 1936, in spite of a loss of more than $12,000 in advertising income in comparison with the previous year. The whole deficit for 1936 was something more than $14,000, less than half the deficit for 1935. We maintain that while *Hygeia* does not pay its way financially, it is a very valuable A.M.A. asset and does much to set us right before the reading public. We can afford to pay for the work it does for us.

At the postgraduate session in Indianapolis, attention was called to the large group of senior students from the medical school who were in attendance at one of the evening lectures. Seldom have we seen such a sprightly bunch of young

chaps—clean cut, alert, and intensely interested in what was going on. Often we wonder if our medical students fully appreciate the unusual opportunities afforded them. Probably few other schools in the country afford so much clinical material right at hand and so many opportunities to hear from the medical leaders of other sections of the country.

After looking over the Atlantic City number of *The Journal of the A. M. A.*, an acquaintance of ours remarked, "Gee, that is a dandy program; think I'll go down!" It *is* a good program—an outstanding program. A matter of perhaps three hours a day in attendance at section and general meetings will pay huge dividends. A visit to Atlantic City is always a pleasant little vacation, and June is an ideal time to be there, for the resort is not overcrowded at that time, better hotel accommodations are available, and there is an added salty tang to the Atlantic breezes. Early indications are that the registration will be larger than ever at Atlantic City.

The lowly plantain, a pest that bothers the lover of a clean lawn, now is charged with being a rather common cause of hay fever. It seems that both varieties, the common plantain and its English cousin, buckhorn, have been found to be the source of irritation in many cases. A well prepared report upon this is published in *The Journal of the American Medical Association* for May 1, with Drs. Blumstein and Tuft, of Philadelphia, as authors. An interesting thing about plantain is that it is a two-year plant. The seed germinates and the plant grows one year, but does not bloom; the second year it comes up early in the spring, blooms, seeds, and dies. Plantain may well be added to our list when making skin tests.

Every little while we receive a paper from another state, with a letter asking that the article be published in an early number of "your valuable JOURNAL." Well, when we receive such truck we are immediately suspicious; first, we wonder why the writer did not ask for space in his own state journal, then we wonder why he picked on Indiana. Such a paper came in a few days ago, and in a very short time we found the Senegambian right on *top* of the woodpile! The author was not a member of his local medical society, and his paper was a bold defense of a group of drugs long since discredited. The paper was returned to the author immediately, but without the comment that we would have liked to send with it. And we will make a long odds bet that this JOURNAL is not the only state medical publication that will be asked to publish the screed.

Harmful results following the use of dinitrophenol have been given so much publicity that the drug should be used very sparingly these days. However, in Indiana we have some physicians who still prescribe the drug as a remedy for obesity. Oh, yes, it will reduce, but after effects are frequently calamitous. Several hundred cases of lens opacity have been directly traced to the use of this drug, and several cases of serious involvements of the iris muscle also are attributed to the use of dinitrophenol. There are a few folk who need some degree of fat reduction, but the use of drugs for that purpose usually is ill-advised. Weight increase generally is due to an increase in food intake, or to the too generous use of fat forming foods, and these can be regulated without the use of drugs. However, if you must use drugs, why tempt Fate by using a drug that is known to be potentially dangerous?

Dr. Harry L. Smith of the Mayo Clinic presents a brief study of the "Incidence of Coronary Sclerosis Among Physicians," in the April 17th issue of *The Journal of the American Medical Association*. Commenting on the fact that many writers have stated that this disease does not commonly appear in wards of hospitals, but rather that it is found in the "intelligentsia," Smith reports his observations on the Clinic records as to occupations of those affected with coronary disease. Approximately 300 Clinic cases, involving six groups, were studied: farmers with 2.5%; laborers, 2.6%; clergymen and lawyers, 4.6%; bankers, 5.3%; physicians, 10.7% represent the incidence of this disease in the cases checked. In the group of physicians, it was found that coronary disease was most commonly observed at the ages of fifty to sixty. Smith concludes this interesting study with the observation that " . . . the incidence is lowest among those who do manual labor and highest among those who do mental work, and it would seem that it is highest of all among physicians."

Hoosier medicine extends a most cordial "welcome home" to Dr. and Mrs. Henry W. Greist who for the past seventeen years have been engaged in medical missionary work at Point Barrow,

Alaska. Dr. Greist was born in Indiana and was a graduate of Indiana Medical College in 1894. He and his wife have attained world-wide recognition for their humanitarian services in the frozen North. They were in charge of the Presbyterian hospital at Point Barrow during their residence there, and their medical and missionary work has been largely restricted to native people. Occasionally they had distinguished guests, among whom were Raold Amundsen, the explorer, and the famous Colonel Lindbergh. Early this month Dr. Greist will be honored by Hanover College which will bestow upon him the degree of Doctor of Divinity. Dr. and Mrs. Greist will make their future home in Monticello, Indiana, where Dr. Greist practiced his profession for many years. Through all the years of his absence from Indiana, Dr. Greist has maintained his membership in the Indiana State Medical Association.

Dr. O. B. Nesbit, medical director of the Gary schools, has issued a report concerning diphtheria immunization in that city, and the report offers food for thought. In the period from 1917 to 1924, there was reported to the city health department a total of 1,047 cases of diphtheria, with 121 deaths. This is an average of 131 cases per year, with an average of more than 15 deaths. From 1925 to 1936, inclusive, a far different picture is offered. The total number of cases in that period was 429, with 34 deaths, an average per year of 36 cases and less than 3 deaths. Dr. Nesbit says in this report that "the table indicates that by immunizing the school age group, the number of cases and deaths from diphtheria can be greatly reduced. This is contrary to a pronouncement made elsewhere, that no effect would be shown until one-third of the pre-school age group was reached." Certainly the ideal diphtheria immunization program includes the pre-school age children, but even if it does not include them, we believe the results shown in the above-mentioned report justify the efforts. Dr. Nesbit's whole report is printed on page 324 in this issue.

Have you been solicited by a midwestern "bureau" to have your name included in their directory of physicians which, the promoters say, is used by insurance companies in selecting physicians to give medical care to clients? An inquiry sent to numerous insurance companies has resulted in prompt answers from those insurance companies, each of whom denies ever using the directory. One reply is so explicit that we quote one paragraph: "In selecting examiners for this Company, we would not refer to such a list, because we realize that every doctor named thereon has paid to be listed, regardless of his credentials, medical standing or efficiency. With such a knowledge, a list of this kind in our hands would really operate against the names found on it. We would consider that they could not succeed on their own merit, and must pay for such advertisement. . . . it is a fraud which should be stopped." Of course, you will not be asked to pay ten dollars to have your name included in the directory, but it will not be included unless you promise to purchase a copy of the directory at a cost of ten dollars. Need we say more?

The new department of the *Journal of the American Medical Association* devoted to discussions of Association affairs and to medical economics is meeting with great favor. It is exceptionally well edited and the material is readable and informative. Particularly do we like the pictures taken in the various departments of the American Medical Association. They give to the medical profession an opportunity to know more about what really is going on in the beautiful and efficient building at 535 North Dearborn Street in Chicago; they are not only reading about it, they are visualizing the whole thing. Those folk who manage our affairs at the American Medical Association headquarters have a stupendous program, and they carry on in a fashion much to our liking. We can assist them by increasing the number of Fellows in the A. M. A. While this roll steadily increases, too many of our members fail to appreciate what their support will mean. If you are not a Fellow, take the necessary steps to become one. Your county society secretary will take care of details; your only need is to hand him the necessary seven dollars which includes a subscription to the best medical journal published, the *Journal of the American Medical Association.*

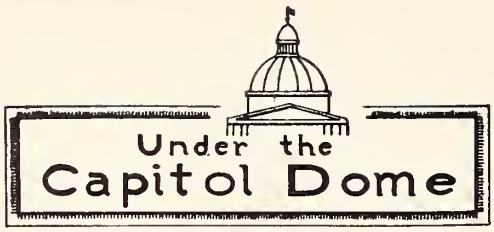
Dr. George Dillinger confides that numerous members of our Association already have made their reservations at the French Lick Springs Hotel for the time of the annual convention, October 4, 5, and 6. Thus they are assured of choice accommodations at Tom Taggart's famous hostelry. We are advised that Tom, in person, will be on hand to greet all Hoosier medics and to see to it that they have the greatest convention in their notable history. The "foothills of the Cumberlands," long famed for their beauty and restfulness, are at their best in early October. There is a green in the foliage that appears at no other season; the air has a tang of the oncoming season of frost that gives a zest and sparkle to those

who breathe it. The almanac says that the moon will be "just right," the weather will be all that could be desired, and a tip from the steward is that the table will outdo all former reputations it may have established. All this, coupled with the fact that the scientific program will be of the top-notch variety, means that we are in for one of the best sessions in the history of our Association. It is by no means too early to mark your calendar and send in your reservations. And you should arrange to get there on Sunday afternoon to avoid that hurry-up stuff so common on opening day.

The auto trailer has become a problem that confronts every board of health. A little while ago, an occasional trailer was seen. Today, even in colder weather times, trailers are more than numerous, they are omnipresent. The latter part of last June, while on a Canadian vacation, fifty varieties of trailer were noted, parked at the end of the only road leading to the Lake-of-the-Woods from the south; the fishing season was just opening. The transcontinental highways are dotted with these travel devices. The sporting and outing magazines are replete with advertisements which claim all sorts of advantages and comforts for this mode of travel. Many communities already have made ample parking provision for them, though the question of proper sanitation seems not to have been fully met, and therein lies the special problem for our health folk who seem to be alert to the situation. Many official groups even now are formulating and promulgating rules regarding the matter. Sooner or later the nomadic spirit rises in most of us, and it would seem that the trailer offers the most popular outlet. Trailer travel, though we never have tried it, is said to be quite comfortable, and in addition it affords an economical method of transporting one's family about the country. Trailer addicts should be warned about several things by their family physicians, among them being the necessity of due care in the matter of drinking water and the observance of the sanitary laws of the health departments in the communities visited.

The various cults continue their efforts to encroach upon the practice of medicine. Nearly every state legislative session sees one or more bills intended to give this or that cult an "edge." Just now it is in Pennsylvania that a very decided effort is being made to increase the limitation of practice of various groups. If the bills now under consideration become laws, many odd things would arise to perplex the regularly licensed physicians of that state. They would be unable to palpate the spine or use the roentgen ray in examining that important part of the anatomy without first receiving a license from the chiropractic board. The chiropodists would become foot surgeons. The optometrists would become full-fledged optometric eye specialists (they allege that they should care for the eyes in the same manner as care of the teeth is assigned to dentists). A member of the House, an unlicensed chiropractor, has brought in a bill under which "allopathic and homeopathic medical specialists must fulfill certain additional requirements and be classified by law." Added to the woes of the legislative committee of the Medical Society of the State of Pennsylvania is the fact that the Department of Public Instruction has given an official "OK" to many of these bills on the ground that they propose higher educational requirements. However, we continue to have faith in the common sense of a majority of the members of our state legislatures and believe that Pennsylvania physicians will be able to defeat these pernicious bills.

We dropped in the other evening to look over a little outdoor show in Chicago which featured the various phases of modern camp life. A year ago we had a delightful vacation in the Canadian wilds and we went to the show to renew our acquaintance with the owners and to make reservations for the coming season. The visit was followed by a violent attack of "fishing fever," with blood all het up, nerves on edge, and all that, all caused by talking to the camp managers, looking at fish recently caught in waters well known to us, and in trying to impart some of our enthusiasm to a couple of chaps who have signed up for the 1937 trip. This vacation thing gets one. We get the fever so early that even now, the latter part of April, our reels are oiled and checked, rods are re-wound and inspected, new baits and new lines are in the tackle box and, if the truth were told, all arrangements are made whereby a few choice worms will be available along the latter part of June. (We never have gotten over the days when we strung worms upon a hook and tossed them into the placid waters of Wild Cat Creek, down in Carroll County, so in deference to that memory, a choice collection of worms will take their place alongside the river runts, snook pikies, ding bats, muskey munks, and others of the new baits that find a place in the 1937 fishing equipment.) Your vacation should be well planned, even now. If you have not made these plans, by all means get at it. No one needs a vacation more than a doctor, so declare a "sit-down strike" for a little while, get away from the routine that affects most of us, put aside all else save a bit of personal, unhampered enjoyment, and take that vacation while you are able to enjoy it.



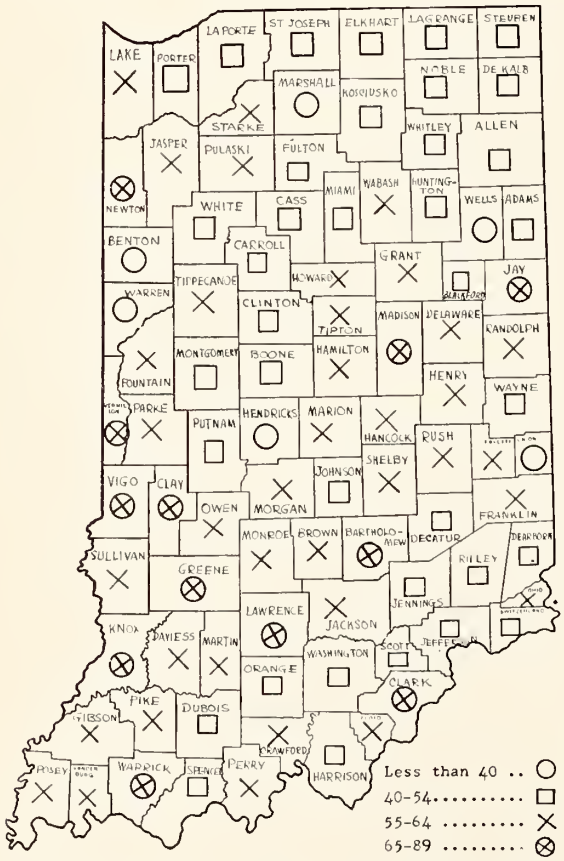
Indiana's record for maternal and infant deaths appears to be approximately on a parity with other states with similar populations and of equal economic status, a chart released by the Children's Bureau of the United States Department of Labor reveals.

The study upon which the chart was based puts Indiana in the same classification as Michigan, Ohio, and Kentucky, but in a lower bracket than Illinois and Wisconsin.

The class into which Indiana was placed comprises those states which recorded an average of 58 to 79 maternal deaths per 10,000 live births over the period 1930 to 1934, and 55 to 64 infant deaths (deaths under one year of age) per 1,000 live births.

INDIANA'S INFANT MORTALITY RATES —1930-1934

Deaths Under One Year of Age Per 1,000 Live Births

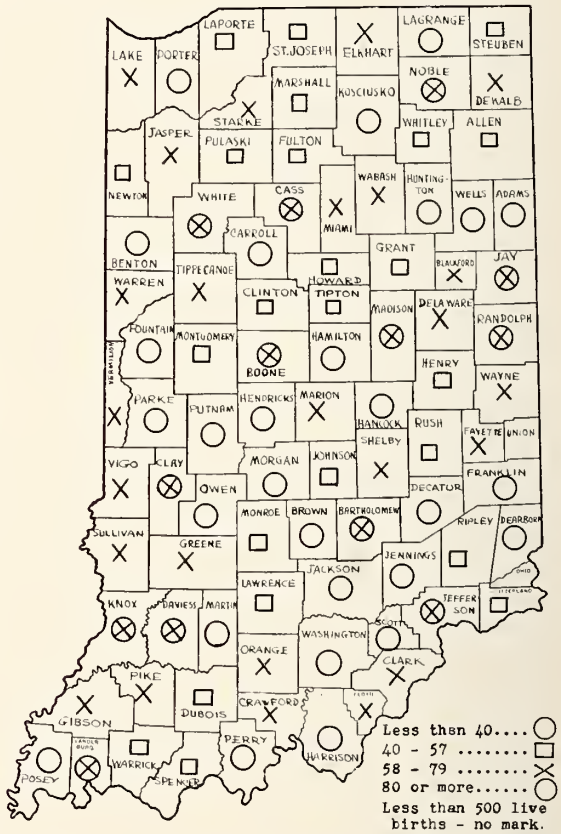


The group into which Indiana falls in the maternal mortality rate comprises by far the major part of the states, and includes Maine, New Hampshire, Vermont, Massachusetts, New York, Pennsylvania, Delaware, Virginia, North Carolina, Michigan, Ohio, Kentucky, Tennessee, Alabama, Mississippi, Missouri, Arkansas, Kansas, Oklahoma, Texas, Montana, Wyoming, Colorado, Washington, Arizona, and the District of Columbia.

The group with the lowest state-wide maternal mortality rate (40 to 57 per 1,000 births), includes Connecticut, Rhode Island, Maryland, West Virginia, Wisconsin, Illinois, New Jersey, Minnesota, Iowa, North Dakota, South Dakota, Nebraska, Idaho, Utah, Oregan, and California.

INDIANA'S MATERNAL MORTALITY RATES —1930-1934

Deaths Assigned to Puerperal Causes Per 10,000 Live Births



Line "80 or more" should be followed with a sign X inside the circle.

The highest maternal death rate (80 per 10,000 live births or more) occurred in South Carolina, Georgia, Florida, Louisiana, New Mexico and Nevada.

The states were classified as follows for infant mortality:

Group with less than 40 infant deaths per 1,000 live births: None. (However, some counties in most states were in this classification.)

Group with 40 to 54 deaths per 1,000 births: Massachusetts, Connecticut, New Jersey, Wisconsin, Illinois, Minnesota, Iowa, Arkansas, South Dakota, Nebraska, Kansas, Washington, Oregon, Idaho, and Utah.

Group with 55 to 64 deaths per 1,000 births: Vermont, New Hampshire, Rhode Island, New York, Pennsylvania, Florida, Michigan, Indiana, Ohio, Kentucky, Mississippi, Missouri, North Dakota, Oklahoma, Montana, Wyoming, and California.

Group with 65 to 89 deaths per 1,000 births: Maine, Delaware, Maryland, West Virginia, Virginia, North Carolina, South Carolina, Georgia, Tennessee, Alabama, Louisiana, Texas, District of Columbia, Colorado, and Nevada.

Group with the highest rate (90 or more): Arizona, and New Mexico.

The study for Indiana, as shown by the accompanying charts taken from the Children's Bureau maps, shows that Indiana (like every other state) is spotted, with some counties showing good records, others less good.

Study of the map for the whole United States would indicate that the heaviest death rate, both maternal and child, occurs in areas thickly populated with Negroes and with Indians, Dr. Verne K. Harvey, director of the Indiana division of public health, said. This fact is particularly evident in some of the southern and western states. Taking the country as a whole, the map shows that rural areas have considerably higher mortality rates than urban areas, a situation which is not entirely true in Indiana, Dr. Harvey pointed out.

Dr. Harvey qualified his comments on the study with the statement that any generalities reached from study of a map were subject to revision, and that error in deductions were possible. With this reservation, he pointed out that the Indiana study showed, among other things, that hospital facilities are present in Indiana counties which have the highest mortality rates. There is no indication, however, as to the extent of their use.

Indiana compares favorably with other states of similar economic and population status, Dr. Harvey said.

In Indiana, the loss of life through maternal and child deaths apparently does not follow the economic standards, because high rates occur in some wealthy areas, Dr. Harvey pointed out. This, however, seems to be an exception to the rule, because through the country as a whole, the death rate seems to follow the economic condition somewhat closely, he said. Poor rural areas seem to have the highest death rates.

A glance backward at the record of the infant and maternal deaths in Indiana gives a graphic picture of the need for the maternal and child health program under the Social Security Act. The statistics have been kept by the state health division.

Medical men and public spirited laymen throughout the state are cooperating with the Bureau of Maternal and Child Health of the State Division of Public Health in carrying out the program.

During the week of May 24, Catherine Lenroot, head of the Children's Bureau of the Department of Labor, and Dr. Martha Elliott, of the Bureau, were in Indianapolis and conferred with Dr. Harvey and other health authorities on the program.

Records of the state health division show 46,978 infant deaths during the 13-year period beginning in 1923. During the period the rate of infant deaths varied from a peak of 71.2 per 1,000 births to 51.4 per 1,000 births. The highest death rate was in 1923; the lowest in 1935. The 1934 rate was 56.4. During the same 13-year period, a total of 4,430 Indiana women died from puerperal causes. The death rate from puerperal causes reached its peak in 1926, with a total of 409 deaths and a rate of 13.4 per 100,000 population. The 1935 total of deaths was 261, and the rate, 7.9 per 100,000 of population.

Whether a man's work influences not only his health and mental outlook but his susceptibility to crime as well is an interesting question that comes to mind with a study of the occupations of prisoners in the state's penal institutions. The butcher, the baker, the mechanic, and eighty-one other types of workers—both physical and mental—are represented among the 747 men who were committed to the Indiana State Reformatory during the past fiscal year.

The largest group, which comprised 192 individuals, was laborers. Farm laborers made up the second largest group, with 122 men. The third largest was truck drivers, with 61.

Groups with ten or more were: Bakers, 11; barbers, 15; chauffeurs, 11; office clerks, 10; electricians, 13; mechanics, 25; painters, 27; porters, 36; salesmen, 12, and waiters, 12. There were only 13 committed during the year who had no occupation.

ARE YOU ONE OF THE 2,846 PAID-UP MEMBERS OF THE INDIANA STATE MEDICAL ASSOCIATION? IF YOU ARE DELINQUENT, THIS IS THE LAST ISSUE OF THE JOURNAL THAT YOU WILL RECEIVE.

DEATHS

OLIVER N. HUFF, M.D., of Fountain City, died April twenty-third, aged eighty-five years. Dr. Huff had retired from active practice. He was an honorary member of the Wayne-Union County Medical Society and of the Indiana State Medical Association. Dr. Huff graduated from the University of Michigan Medical School, Ann Arbor, in 1878.

CHARLES MAYER FRANKLIN, M.D., of Lafayette, died April nineteenth, aged eighty-one years. Dr. Franklin had retired from active practice in 1913. He graduated from the University of Pennsylvania School of Medicine, Philadelphia, in 1881.

FRANK C. KLEIN, M.D., of Indianapolis, died April twenty-second. Dr. Klein was sixty-four years old. He graduated from the Medical College of Indiana, Indianapolis, in 1903, and was a staff physician at St. Francis Hospital. He was a member of the Indianapolis Medical Society, the Indiana State Medical Association, and the American Medical Association.

ANNA I. MCKAMY, M.D., of New Albany, died May twelfth at the home of her brother in Mattoon, Illinois. Dr. McKamy was seventy-five years old. She had served as public health officer for New Albany and had been active in civic affairs. She had practiced in New Albany for forty years. Dr. McKamy retired from active practice several months ago because of ill health. She graduated from the Northwestern University Woman's Medical School, Chicago, in 1897, and was an honorary member of the Floyd County Medical Society, and the Indiana State Medical Association.

ALVIN G. TILLOTSON, M.D., retired physician of Michigan City, died April twenty-ninth, aged ninety years. One of the oldest physicians in Indiana, Dr. Tillotson entered practice sixty-seven years ago, and served as coroner of LaPorte County in 1882. Dr. Tillotson was an honorary member of the LaPorte County Medical Society and for many years had been a member of the Indiana State Medical Association and the American Medical Association.

CHARLES SUMNER WISEMAN, M.D., of Union Mills, died April twenty-fifth, aged fifty-eight years. Dr. Wiseman graduated from the Fort Wayne College of Medicine in 1905.

WILLIAM ALEXANDER HATFIELD, M.D., of Kokomo, died May second, aged seventy-three years. He was a graduate of the Curtis Physio-Medical Institute, Marion, Indiana, in 1895.

JAMES M. SAMPLE, M.D., of New Washington, died April twenty-fifth, aged fifty-five years. Dr. Sample was a graduate of Louisville Medical College, Louisville, Kentucky, in 1907.

JAY W. NEWELL, M.D., of Denver, Indiana, died May fifth, aged seventy-nine years. Dr. Newell had been a practicing physician for fifty-seven years, and was the oldest practicing physician in Miami County. Dr. Newell was graduated as an honor student from the University of Louisville School of Medicine in 1880. He was a member of the Miami County Medical Society, the Indiana State Medical Association and the American Medical Association.

OLIVER FRANK WELCH, M.D., of Westport, died May eleventh, aged sixty-five years. Dr. Welch was not in active practice. He was a graduate of the Hospital College of Medicine, Louisville, in 1897.

HOOSIER NOTES

Dr. M. O. Robertson has moved his office from Bedford to Medora where he has leased the entire floor over the bank building.

The Elkhart County Medical Society has changed its meeting time from the first Thursday of each month to the first Wednesday of each month.

Dr. Amos Reusser, of Berne, attended a reunion of his class of 1897 at the Chicago Homeopathic School of Medicine in Chicago last month. He has practiced continuously since his graduation, a period of forty years.

Twenty-five years after he left Greensburg, Dr. Curtis M. Bland, of Laguna Beach, California, returned for a visit with friends, April twenty-eighth. Dr. Bland has retired from active practice.

Dr. F. R. Nicholas Carter addressed members of the Exchange Club in South Bend, April 30, explaining the advantages of the early care of syphilis.

The annual meeting of the American Association for the Study of Goiter will be held in Detroit, Michigan, June 14, 15 and 16, 1937, with headquarters at the Book-Cadillac Hotel. Scientific sessions are open to members of the medical profession in good standing. Registration fee is three dollars.

Dr. William P. (Billy) Fultz was a guest of Dr. Herman Morgan, of Indianapolis, during the week of the postgraduate course.

At the recent meeting of the American College of Physicians in St. Louis, four Indiana physicians were made Fellows. They are Drs. C. J. Clark, J. H. Stygall, H. M. Banks, all of Indianapolis, and Dr. R. B. Sanderson, of South Bend.

Indiana physicians made associate fellows of the American College of Physicians at the St. Louis session are Dr. C. L. Rudesill, Dr. R. A. Solomon, and Dr. C. B. Bohner, of Indianapolis, and Dr. Gordon B. Wilder of Anderson.

Dr. W. L. Portteus, of Franklin, addressed an audience of fifty who attended the May fourth meeting of the Franklin Kiwanis Club. Dr. Portteus' subject was "Cancer."

Miss Naida Jones, of Anderson, and Dr. J. W. Little, Jr., of Indianapolis, were married in Anderson, April seventeenth.

Dr. James B. Maple, of Sullivan, addressed members of the Sullivan Rotary Club, May third, on the subject of welfare work in the community, particularly emphasizing child welfare work in connection with Child Health Week.

Two respirators of modern improved type have been presented to Ball Memorial Hospital in Muncie, for use in the new medical and laboratory building and the hospital, by Mrs. Irene Kitselman, who presented the gift in memory of her husband, Carl M. Kitselman. The respirators were demonstrated at the first medical meeting to be held in the new Edmund Burke Ball medical and laboratory building, April twenty-seventh.

Dr. William N. Wishard, Jr., of Indianapolis, addressed a group of women at Shirley, Indiana, on "Social Diseases." The meeting was held at the Wilkinson Christian Church, April twenty-ninth.

Dr. George R. Clayton, of Monon, celebrated his eighty-third birthday, April eighteenth, at the home of his son, Dr. George Clayton, Jr., in Lafayette. The senior physician, still in active practice, has been practicing medicine for fifty-six years.

A bronze plaque in memory of Dr. Maurice I. Rosenthal, first president of St. Joseph's hospital staff in Fort Wayne, has been placed in the reception hall of the hospital by the staff. Dr. Rosenthal died December 24, 1935.

Newspaper announcements have been made to the effect that the Wabash Valley sanitarium, near Lafayette, has been sold to the Good Samaritan Lutheran society which has taken over the institution and will continue to operate it as a sanitarium and as an old people's home. The society owns similar institutions in Ottawa, Illinois, and in Chicago.

E. L. Burrous, of Bremen, will discontinue his general practice there this month. He plans to sail from New York on June twenty-third to take special postgraduate work in London and Vienna. Dr. Burrous expects to return in February of 1938 and plans to select a location in northern Indiana. Dr. John M. Thompson will take over Dr. Burrous' practice about June twentieth.

Dr. Philip T. Holland, of Bloomington, addressed members of the Bloomington Rotary Club, April twenty-eighth, on the subject of "Medical Economics and Social Medicine."

At the meeting of the Eighth District Medical Society in Anderson, May 5, officers were elected as follows: Dr. E. M. Clauser, Muncie, president; Dr. C. V. Rozelle, Anderson, secretary-treasurer; Dr. M. A. Austin, Anderson, councilor for two years. The next spring meeting will be held in Muncie.

Several pathologists of Indiana and other midwestern states took examinations before the American Board of Pathology for certification as clinical pathologists, March 26, 1937, in Chicago. The following Indiana physicians have been certified by the American Board of Pathology to date: Horace M. Banks, Indianapolis; C. G. Culbertson, Indianapolis; A. S. Giordano, South Bend; Frank P. Hunter, Lafayette; M. W. Lyon, Jr., South Bend; B. W. Rhamy, Fort Wayne; Will Shimer, Indianapolis, and H. C. Thornton, Indianapolis.

The corner stone of the new $668,000 clinical building of the Indiana University Medical Center in Indianapolis was laid May twelfth with appropriate ceremonies. Dr. Frank Mann, of the Mayo Clinic, was a speaker. Dr. William Lowe Bryan, president of Indiana University, laid the corner stone as the concluding feature of the program. Dr. W. D. Gatch, dean of the medical school, presided. The ceremony was attended by public and civic leaders of the City of Indianapolis and of the State of Indiana, and formed a part of the observance of Hospital Day.

Dedication of the new Flower Mission Memorial Tuberculosis Hospital and the John Maurice Butler dispensary were features of the observance of Hospital Day in Indianapolis, May twelfth. Mrs. David Ross, president of the Flower Mission, and Dr. Herman G. Morgan, secretary of the Indianapolis Board of Health, unveiled the tablet which dedicated the new building. The new building will provide for 100 patients in advanced stages of tuberculosis. It is located on Fall Creek boulevard, west of the other Indianapolis City Hospital buildings.

NARCOTIC REGISTRATION

If you do not receive your blanks for registration under the Harrison Narcotic law (forms 678 and 713 for reregistry) by June 15, request should be made to the office of the Collector of Internal Revenue, Indianapolis. The forms should be executed and returned with certified check or money order as early as possible. Give this your attention NOW. Blanks must be filed by July first.

Confusion Regarding Indianapolis Medical and Dental Business Bureau

Occasionally there has been some confusion on the part of the public concerning the Medical and Dental Business Bureau and other companies collecting physicians' accounts and operating under somewhat similar names. Physicians should enlighten their patients in this respect. The Medical and Dental Business Bureau is established at 330 Bankers Trust Building in Indianapolis and is the only organization having the official approval of and operating exclusively for members of the Indianapolis Medical Society, Dental Society and Indianapolis hospitals.

FIRST DISTRICT MEDICAL SOCIETY

The First District Medical Society will hold its annual meeting, June seventeenth, at the Evansville Country Club.

Program

Golf in the afternoon.

Dinner at 6:30 p. m.

Scientific program at 8:00 p. m. Papers will be limited to 15 minutes each.

1. E. O. Nay, M. D. Terre Haute.
   Subject: Some Reasons for Need for Change.
2. F. R. N. Carter, M.D., South Bend.
   Subject: Report on Examination of Food Handlers.
3. A. F. Weyerbacher, M.D., Indianapolis.
   Subject: Control from the Standpoint of Private Practice.
4. Judge J. W. Spencer, Jr., Evansville.
   Subject: Legal Aids of Control.
5. Minor Miller, M.D., Evansville.
   Subject: The Health Officer's Part in Control.

AMERICAN BOARD OF SURGERY

An American Board of Surgery recently has been organized. The Board is a member of the Advisory Board of Medical Specialties which includes all of the boards of certification for the different medical specialties which have been already organized. Since boards already exist for the certification of surgical specialists in ophthalmology, otolaryngology, obstetrics and gynecology, genitourinary surgery and orthopedic surgery, it is expected that the American Board of Surgery will be responsible for the certification of general surgeons as well as those practicing in the remaining specialized subdivisions of surgery. Various surgical societies have cooperated in the creation of this new board, and these include the American Surgical Association, the Surgical Section of the

American Medical Association, the Americal College of Surgeons, the Southern Surgical Association, the Western Surgical Association, the Pacific Coast Surgical Association and the New England Surgical Society. Each of these organizations has one or more representatives on the Board. Present officers for the Board are: Chairman, Dr. Evarts A. Graham, St. Louis; vice-chairman, Dr. Allen O. Whipple, New York City; secretary-treasurer, Dr. J. Stewart Rodman, Philadelphia.

The Board will hold its first examination on September 20, 1937. All inquiries concerning applications for this examination should be sent to the secretary's office promptly. Requests for booklets of information, application blanks, and other information may be sent to the secretary, Dr. J. Stewart Rodman, 225 South Fifteenth Street, Philadelphia, Pennsylvania.

NEWS OF AUXILIARIES

Officers for the coming club year of the Auxiliary to the Vigo County Medical Society were elected at the last meeting of the season, May 3, as follows: Mrs. J. V. Richart, president; Mrs. M. C. Topping, first vice-president; Mrs. E. J. Hunt, second vice-president; Mrs. L. A. Malone, secretary, and Mrs. W. O. Baldridge, treasurer.

The Auxiliary to the Madison County Medical Society held a meeting April nineteenth in Anderson with Mrs. Perry Cotton, of Elwood, and Mrs. Charles Armington and Mrs. Fred Wishard, of Anderson, as hostesses. New officers were elected as follows: Mrs. E. E. Hunt, president; Mrs. Paul Nelson, president-elect; Mrs. P. T. Lamey, vice-president; Mrs. E. M. Conrad, treasurer; Mrs. John C. Drake, secretary; Mrs. Sam Litzenberger, corresponding secretary; Mrs. W. L. Sharpe, flower chairman, and Mrs. M. A. Austin, publicity.

The Woman's Auxiliary to the Indianapolis Medical Society elected officers at its final meeting of the season, held in the L. S. Ayres and Company auditorium, May 7. Mrs. Walter P. Morton is president for 1937-1938. Mrs. Edmund D. Clark was elected president for 1938-1939. Mrs. M. W. Manion is first vice-president; Mrs. W. E. Tinney, second vice-president; Mrs. J. T. Wheeler, third vice-president; Mrs. Paul Beard, treasurer; Mrs. Russell Sage, recording secretary; Mrs. Russell Hippensteel, corresponding secretary, and Mrs. Byron K. Rust, publicity. Committee chairmen appointed by the president for 1937-1938 are: Mrs. C. W. Bowman, program; Mrs. J. T. Waldo, social; Mrs. William Dugan, bulletin; Mrs. Ben Moore, *Hygeia;* Mrs. W. E. Tinney, memorial; Mrs. R. O. McAlexander, parliamentarian, and Mrs. A. S. Ayres, historian.

INDIANA UNIVERSITY NEWS NOTES

The annual postgraduate medical course under auspices of the Indiana University School of Medicine and the Indiana State Medical Association was held at the I. U. Medical Center in Indianapolis May 10-14, with an attendance of more than 500 physicians.

Morning and afternoon sessions were held at the Medical Center, where visiting doctors were taken to the wards, operating rooms and laboratories for observation of all sorts of diseases and latest operative technics and treatments. Lectures were held downtown in the evenings, with a public lecture Friday evening, May 14, with Dr. Maude Slye, of the University of Chicago, as the speaker.

A number of guest professors from other medical schools and hospitals were on the postgraduate course program. Members of the visiting faculty included: Dr. Stanley Gibson and Dr. C. A. Aldrich, Northwestern University; Dr. A. D. Kaiser, University of Rochester; Dr. Samuel A. Levine and Dr. Elliott C. Cutler, Harvard University; Dr. Vernon C. David, Rush Medical College; Dr. Nicholson J. Eastman, Johns Hopkins; Dr. Frank C. Mann, University of Minnesota; Dr. Harold N. Cole, Western Reserve University, and Prof. Maude Slye, University of Chicago.

The committee on graduate education in charge of the postgraduate course was as follows: Dr. L. A. Ensminger, chairman, Dr. C. J. Clark, Dr. John Owen, Dr. J. K. Berman, Dr. L. H. Segar and Dr. W. N. Wishard, Jr., all of Indianapolis.

Dr. Levine, in an address on heart diseases, told the assembled physicians that the seeds of valvular heart diseases in adults are commonly sown in childhood through rheumatic fever which sometimes escapes the attention of parents and even physicians because of its resemblance to the common cold.

Removal of tonsils and adenoids from children may not be in their best interests and should not be ordered without a physician's recommendation, Dr. Kaiser, of the University of Rochester, told the doctors. "In recent years, many of the complaints of childhood have been blamed on diseased tonsils and adenoids," he said. "Consequently, many children have had operations performed to remove these organs. Inasmuch as the exact duties of tonsils are not understood, medical men have been giving more and more attention to the effect of the tonsil operation on the child's development. There are some reasons to believe that tonsils which are not diseased may serve the child in a useful way, so that it may not be wise to take out the tonsils of all children, regardless of their condition."

New ways of getting cod liver oil without its nauseating taste were described by Dr. R. N.

Harger, head of the I. U. Department of Biochemistry. The important vitamin D may be added to milk in the form of concentrated cod liver oil or it may be produced by the cow through the feeding of irradiated yeast, Dr. Harger said. Another method of introducing vitamin into milk is to irradiate milk by passing it through a carbon or mercury arc lamp. This method is being followed commercially in Ohio and in some other sections of the country, but is not yet available in Indianapolis, the speaker pointed out. Another method of building up vitamin D content in food is to add it to bread.

With all the convenience of taking cod liver oil in foods rather than out of the bottle, Dr. Harger declared that this is no better except to the taste than taking it by the teaspoonful. He discounted the value of sausage, ice cream, cold cream, chewing gum and other products which are claimed to be filled with vitamins and pointed out that milk and bread are the only two foods which the Committee on Foods of the American Medical Association has approved for the adding of vitamin D. It would take 25 sticks of so-called vitamin chewing gum and two one-dollar jars of so-called vitamin cold cream to give the equivalent of a teaspoonful of cod liver oil, Dr. Harger added.

The speaker referred to numerous tests with rats in the laboratories of the medical school to determine the effects of administration of different types of vitamins. His parting advice was "to provide plenty of calories and the vitamins will take care of themselves."

Cornerstone laying ceremonies for the new $668,000 Clinical building at the Indiana University Medical Center in Indianapolis were held at 11:45 a. m. Wednesday, May 12, as one of the events in the National Hospital Day ceremonies at Indianapolis.

Dr. Frank E. Mann, director of research at the Mayo Clinic at Rochester, Minnesota, was the principal speaker. Lieutenant Governor Henry Schricker represented the state government. Mayor John W. Kern was invited to represent the city, and F. M. Logan, the Public Works Administration, and Hugh McK. Landon, the Riley Memorial Association. Dr. Nicholson Eastman, of the Johns Hopkins University, and Dean F. R. Henshaw, of the Indiana University School of Dentistry, were on the speakers' stand. President William Lowe Bryan of the University laid the cornerstone. Dean W. D. Gatch presided.

Open house at the Medical Center was held in the afternoon of May 12. Nurses and doctors were on hand to conduct visitors through the Riley, Long and Coleman Hospitals, the Medical School, Ball Residence for Nurses, and the Dental School.

The cornerstone laying ceremonies were closed in ample time for those participating to attend the ground-breaking ceremonies for the new service building at the Indianapolis City Hospital at 1:30 p. m. The City Hospital grounds are adjacent to those of the Medical Center and those attending the I. U. cornerstone laying attended the City Hospital program also.

Members of the committee on arrangements for the Clinical Building ceremonies were as follows: Mark P. Helm, registrar of the Medical Center, chairman; James W. Carr, secretary of the Riley Memorial Association; Frank R. Elliott, director of publicity, Indiana University; Miss Cordelia Hoeflin, director of the I. U. Nurses' Training School; J. B. H. Martin, administrator, and Albert Scheidt, assistant to the administrator of the I. U. medical center.

At the laying of the cornerstone of the Clinical Building, President Bryan spoke, in part, as follows:

"No part of American history is more significant than the history of professional education. In the earliest period, the student read law or medicine with a practitioner. There were established long ago, here and there, small professional schools such as that at which John Marshall for a few weeks heard lectures in law or such as that school of medicine at Transylvania University in Kentucky where so many Indiana physicians of a hundred years began their professional studies. The best of the teaching of those days is not despised by the best teachers of today. The first-rate master and his first-rate students find their way to a worthy goal in whatever building and with whatever equipment. But with the vast development of the medical sciences, especially within the past half century, there had to be developed schools through which the best that men anywhere know can be brought to the service of the people everywhere.

"We rejoice in what, especially within the past quarter century, the State of Indiana has done to bring medical science at its best to the people of this State. That has meant professors who know the past of medicine and its latest word and it means that those men must have the opportunities of buildings and equipment by which their work can be done at its best. Nothing less than the best is good enough where the lives and health of men are at stake.

"The medical profession wages war. It is not that kind of war in which thousands of helpless women and children are murdered in Spain today. The doctors wage war against the enemies of mankind. They fight to rescue. They labor to establish conditions of health and happiness for all mankind.

"Governor Townsend, Indiana University is glad to be associated with you and the people of whom you are the Chief in this beneficent enterprise."

That the new Clinical building of the Indiana University Medical Center is "ideally conceived for bridging the gap between the laboratory, the clinic

and the hospital," was the estimate placed on the new addition to the I. U. School of Medicine by Dr. Mann.

Dr. Mann is a graduate of Indiana University. Dr. Mann outlined the painstaking preparation which is necessary to the training of the physician. The speaker stressed the importance of research, and stated that "without research in medical science the sick of each succeeding generation would probably receive poorer care and service than the previous one. The history of scientific achievement seems to prove that progress stimulates progress and regression fathers regression.

"One other thing is essential for an institution which assumes the responsibility for training those individuals in whom we place our most valuable possession, health," Dr. Mann said. "All that I have mentioned previously has to do only with the sick patients of today. It is also essential that some provision be made by an institution devoted to training medical students for the patient of tomorrow in those sciences upon which medical science is based.

"This can be accomplished only by research. Research in medical science serves two purposes: (1) to discover new facts and (2) to keep alive the spirit of research."

In closing, he said the following:

"The addition of this new and essential building to the group of impressive structures previously constructed upon the beautiful campus of its medical school gives added proof, if proof were needed, that Indiana University is amply prepared and eagerly desirous of assuming the serious responsibility for giving adequate training to those individuals who would practice the art and science of the profession which has as its ideal to prevent disease, to relieve suffering and to cure the sick."

Dr. R. N. Harger, head of the department of bio-chemistry at the Indiana University School of Medicine in Indianapolis, went to Memphis, Tennessee, the latter part of April, to make a special report before the Federation of American Societies for Biology and Medicine. Dr. Harger discussed the speed with which various parts of the body store alcohol, and the reliability with which brain alcohol can be predicted from blood alcohol.

Hospitals and schools comprising the Indiana University Medical Center were hosts for the third special librarians' informal dinner meeting Monday evening, May 10, in the Indiana University Medical Center. Dr. Thurman B. Rice of the medical school faculty spoke on "The Peculiarity of the Medical Library," and Dr. Frederic R. Henshaw, of the I. U. Dental School, discussed "The Importance of a Dental Library." Following the addresses, a tour of the campus was made, visiting the libraries and other points of interest in the medical center.

Registrants at the Postgraduate Course of the Indiana State Medical Association and the Indiana University School of Medicine Held in Indianapolis, May 10-14, 1937

A

Adair, W. K., Crothersville
Ade, C. H., Indianapolis
Aiken, Milo M., Plainfield
Aker, C. L., Mooresville
Albertson, F. P., Trafalgar
Allen, J. L., Greenfield
Alvis, E. O., Indianapolis
Amos, E. M., Indianapolis
Appel, R. H., Culver
Armistead, H. W., Indianapolis
Arbuckle, W. E., Indianapolis
Austin, F. H., Bloomington

B

Badders, A. C., Portland
Bakemeier, O. H., Indianapolis
Baker, Herman M., Evansville
Balch, J. F., Indianapolis
Ball, C. A., Muncie
Bard, Frank, Indianapolis
Barker, R. A., Oakland, Ill.
Barnett, W. E., Logansport
Barry, M. J., Indianapolis
Batman, F. H., Bloomington
Baxter, Neal E., Bloomington
Beard, Paul, Indianapolis
Beatty, Norman, Indianapolis
Beck, H. A., Lebanon
Beckman, H. F., Indianapolis
Beierlein, K., Fort Wayne
Beeler, R. C., Indianapolis
Beeson, R. H., Muncie
Berman, J. K., Indianapolis
Beverland, M. E., Indianapolis
Bibler, L. D., Indianapolis
Bickel, D. A., South Bend
Bickel, J. E., Fort Wayne
Black, C. S., Warren
Blatt, Ebner, Indianapolis
Boaz, J. J., Indianapolis
Boggs, E. F., Indianapolis
Bohannon, McK. J., Terre Haute
Bohner, C. B., Indianapolis
Bonke-Booher, Olga, Indianapolis
Booher, N. R., Indianapolis
Boren, S. W., Poseyville
Boulden, M. F., Frankfort
Bounnell, H. M., Waynetown
Boyd, C. L., Vincennes
Boyer, F. A., Indianapolis
Brayton, J. R., Indianapolis
Brown, A. E., Indianapolis
Brown, C. W., Rolling Prairie
Brown, E. A., Indianapolis
Brown, F. T., Indianapolis
Brown, L. W., Indianapolis
Brubaker, E. H., Flora
Brubaker, H. S., Huntington
Buckles, H. L., Hartford City
Bunker, L. Z., N. Manchester
Burckhardt, A. E., Tipton
Burkhardt, L., Indianapolis
Burkle, J. C., Lafayette
Butler, R. A., Beech Grove
Byers, N., Bedford
Buttz, Rose J., Indianapolis

C

Cahal, E. E., Indianapolis
Callaghan, W. C., Greensburg
Carlo, E. R., Fort Wayne
Carter, J. V., Tipton
Chambers, Leroy, Union City
Chappell, R. S., Indianapolis
Chen, S. L., Indianapolis
Clark, C. J., Indianapolis
Clark, E. R., Indianapolis
Clark, E. D., Indianapolis
Clark, Eugene, Indianapolis
Claybrook, Indianapolis
Cole, Ira, West Lafayette
Collett, G. H., Crawfordsville
Conway, Glenn, Indianapolis
Cook, G. H., Hammond
Cotter, T. F., Indiana Harbor
Conley, J. L., Indianapolis
Courtney, T. E., Indianapolis
Cox, W. T., Lafayette
Craig, R. A., Kokomo
Cregor, F. W., Indianapolis
Crowder, J. R., Sullivan
Curry, C. A., Terre Haute

D

Dalton, J. E., Indianapolis
Darby, Hawthorne, Manila, P. I.
Darroch, S. C., Cayuga
Davidson, N. C., Indianapolis
Davis, J. A., Flat Rock
Davis, L. H., Crawfordsville
Davis, M. S., Marion
Day, C. W., Indianapolis
Day, J. T., Indianapolis
Denman, R. D., Helmer
Denman, D. C., Monroe, Mich.
Denny, F. C., Greensburg
Denny, J. W., Indianapolis
Dickson, D. D., Letts
Dieter, W. T., Indianapolis
Dietle, E., Indianapolis
Dixon, R. W., Indianapolis
Dorman, W. L., Indianapolis
Dowell, E. H., Rockville
Drake, J. C., Anderson
Druley, G. N., Kokomo
DuBois, C. C., Warsaw
Dudding, J. E., Hope
Dugan, L. J., Clinton
Dugan, T. J., Indianapolis
Dukes, F. M., Dugger
Dunn, F. W., Muncie
Durkee, M. S., Evansville

E

Earp, E. B., Indianapolis
Eberwein, J. H., Indianapolis
Egbert, R. H., Martinsville
Emhardt, J. W., Indianapolis
Emhardt, J. T., Indianapolis
Emme, J. C., Harlan
Engle, R. B., Farmland
Ensminger, L. A., Indianapolis
Epple, S. L., Bristow
Estlick, R. E., Millersburg
Erdman, B., Indianapolis

F

Faulkner, A. S., Waynetown
Ferguson, A. N., Fort Wayne
Ferrara, D. W., Peru

Ferrara, S. J., Peru
Flanagan, E. P., Walton
Fleetwood, R. A., Nappannee
Fichman, J. L., Indianapolis
Flack, R. A., Lafayette
Foreman, H. L., Indianapolis
Fouts, P. J., Indianapolis
Frank, J. R., Valparaiso
Fullerton, R. S., Tipton

G

Gaddy, E. T., Indianapolis
Garber, E. C., Dunkirk
Garner, Wm., Indianapolis
Garrett, J. D., Indianapolis
Garrison, L. J., Gas City
Gauss, J. H. P., Indianapolis
Geider, Roy A., Indianapolis
Gick, Herman H., Indianapolis
Gillespie, C. G., Seymour
Gillespie, G. R., Brownstown
Gitlin, W. A., Bluffton
Glendening, J. L., Indianapolis
Goss, H. W., Indianapolis
Graham, A. B., Indianapolis
Graves, J. W., Indianapolis
Gray, Leon, Martinsville
Green, J. H., N. Vernon
Griffith, J. B., Crawfordsville
Gros, Hubert, Delphi
Gustafson, G. W., Indianapolis
Guthrie, F. C., Anderson
Gwaltney, B. C., Fort Branch
Gwinn, M. D., Rensselaer

H

Habegger, M. L., Berne
Habich, Carl, Indianapolis
Hade, F. L., Bridgeport
Hade, Z. R., Bridgeport
Hadley, M. N., Indianapolis
Haggard, E. B., Indianapolis
Haggard, Gordon, Hope
Hall, O. A., Eaton
Hamer, H. G., Indianapolis
Hardy, J. J., North Salem
Harger, R. N., Indianapolis
Hare, E. H., Indianapolis
Harkness, R. G., Terre Haute
Harold, N. E., Indianapolis
Harvey, H. C., Fort Wayne
Harvey, Verne K., Indianapolis
Haslinger, C. J., Indianapolis
Hatfield, N. W., Indianapolis
Hawk, J. H., Indianapolis
Hays, Everett, Indianapolis
Hetherington, A. M., Indianapolis
Hicks, J. M., Huntington
Hiestand, H. J., Pennville
Higgins, O. C., Lebanon
Himler, James, Indianapolis
Hinchman, C. P., Geneva
Hindrup, D. G., Fort Harrison
Hippensteel, R., Indianapolis
Hodges, Fletcher, Indianapolis
Holdemann, Richard, S. Bend
Holman, J. E., Indianapolis
Houston, W. R., Erlanger, Ky.
Howard, W. H., Hammond
Howell, R. D., Indianapolis
Huckleberry, I. E., Salem
Hudson, Foster, Indianapolis
Hummons, H. L., Indianapolis
Hunley, Glenn, Fairmount
Herd, C. R., Peru
Hutchins, F. F., Indianapolis
Hyman, B., Indianapolis

I

Inlow, C. F., Shelbyville
Iske, P. G., Indianapolis
Irey, P. R., Plymouth

J

Jackson, J. L., Indianapolis
Jackson, J. W., Indianapolis
Jaeger, A. S., Indianapolis
Jaquith, O. S., Indianapolis
Jennings, W. L., Indianapolis
Johns, E. D., Zionsville
Johnson, P. G., Richmond
Johnston, W. R., Charlottesville
Jones, A. T., Indianapolis
Jones, R. E., Clayton

K

Kahler, M. V., Indianapolis
Kaiser, Albert, Rochester, N.Y.
Kamman, H. H., Columbus
Kay, Oran, Spencer
Keeling, J. C., Waldron
Kelly, J. F., Indianapolis
Kempf, G. F., Indianapolis
Kendrew, J., Indianapolis
Ketcham, Jane, Indianapolis
Kim, Y. D., Indianapolis
Kime, E. N., Indianapolis
Kindell, H. D., New Richmond
Kiser, E. F., Indianapolis
Klinger, M. O., Garrett
Knode, K. T., South Bend
Kohlstaedt, K., Indianapolis
Kopp, C. A., Anderson
Kraft, B., Indianapolis
Kraning, K. K., Kewanna
Kratzer, E. F., Kokomo
Kwitney, I. J., Indianapolis

L

Lamb, E. B., Indianapolis
Layman, D. W., Indianapolis
Lansford, John, Redkey
Larkin, B. J., Indianapolis
LaSalle, R. M., Wabash
Laudeman, W. A., Elwood
Lawler, G. F., Indianapolis
Lee, H. M., Indianapolis
Lemmon, B. E., Martinsville
Leser, Ralph, Indianapolis
Lewis, J. R., Indianapolis
Liston, M., Indianapolis
Littell, J. J., Indianapolis
Little, E. O., Indianapolis
Long, A. G., Kokomo
Long, P. L., Anderson
Loop, A. L., Crawfordsville
Lyons, R. E., Bloomington
Lord, G. C., Indianapolis
Lowery, G., Indianapolis
Ludwig, Oscar, Indianapolis
Lukenbill, E. D., Indianapolis
Lindenmuth, E. O., Indianapolis
Luzadder, J. E., New Carlisle

M

Magennis, H. L., Indianapolis
Maisoll, Margaret, Morristown
Manion, M. W., Indianapolis
Mann, W. C., Kirklin
Maple, J. B., Sullivan
Marle, R. M., Indianapolis
Mathys, Alfred, Mauckport
Martin, H. E., Indianapolis
Mattox, E. L., Terre Haute
Maxwell, J. B., Logansport
McBride, Wm. A., Indianapolis
McCaskey, C. H., Indianapolis
McCay, K. L., Romney
McClain, M. L., Scottsburg
McCool, J. H., Evansville
McCormick, C. O., Indianapolis
McCracken, H. M., Argos
McDevitt, D. R., Indianapolis
McDonald, J. P., Evansville
McFadden, W. C., Shelbyville
McIntyre, C. J., Indianapolis
McQuiston, R. J., Indianapolis
McKain, M. C., Columbus
McMurde, H. B., Ft. Harrison
Meredith, E. J., Richmond
Mericle, Earl, Indianapolis
Merrell, B. M., Advance
Merrell, Paul, Indianapolis
Mettel, Howard, Indianapolis
Middleton, H. N., Indianapolis
Miller, D. L., Twelve Mile
Miller, H. A., Marion
Miller, J. Don, Indianapolis
Miller, Minor, Evansville
Mills, J. F., Indianapolis
Mitchell, E. H., Indianapolis
Mitchell, R. E., Indianapolis
Moenning, W. P., Indianapolis
Montgomery, L. G., Muncie
Morgan, Chas., Indianapolis
Morgan, H. G., Indianapolis
Morrison, D. A., Kokomo
Morrison, M. G., Danville
Morrison, J. L., Greensburg
Moser, E. B., Windfall
Moten, E. D., Indianapolis
Mowrer, G. E., Jeffersonville
Muelchi, A. F., Evansville
Mueller, L. B., Indianapolis
Murdock, H. L., Fort Wayne
Murray, F. N., Kokomo
Mozingo, A. E., Indianapolis

N

Nafe, C. A., Indianapolis
Naugle, R. A., Wabash
Naull, Chas., Indianapolis
Neely, M. J., Columbus
Neier, O. C., Indianapolis
Nigh, R. M., Shelbyville
Nolting, H. F., Indianapolis
Norman, O. B., Indianapolis
Norman, W. H., Indianapolis

O

Oberlin, T. W. Hammond
Oliphant, J. T., Farmersburg
Osborne, H. S., Indianapolis
Ottinger, R. C., Indianapolis
Overpeck, G., Alexandria

P

Padgett, E. E., Indianapolis
Painter, L. W., Winchester
Pahmeier, J. W., Sandborn
Paris, D. W., Kokomo
Parker, Carl B., Danville
Parker, Portia, Indianapolis
Petranoff, T. V., Indianapolis
Pettibone, C. R., Crown Point
Pfaff, D. A., Indianapolis
Piazzi, L. F., Michigan City
Pierson, R. H., Spencer
Pirkle, H. B., Rockville
Pitkin, E., Martinsville
Pitkin, M. C., Martinsville
Pyke, F. L., Lafayette
Pyle, H. D., South Bend

R

Radcliffe, F. E., Bourbon
Ramsey, Hugh, Bloomington
Reed, J. H., Logansport
Reed, Louis, Indianapolis
Reed, W. C., Bloomington
Reisler, S., Indianapolis
Rendel, C. T., Mexico
Rhea, G. D., Greencastle
Rice, T. B., Indianapolis
Richards, E. E., Russellville
Ricketts, J. W., Indianapolis
Riggins, I. W., Indianapolis
Rainey, E. A., Lebanon
Ritter, A. L., Indianapolis
Roberts, E. S., Indianapolis
Rommel, C. H., Lafayette
Rosenwasser, J., Mishawaka
Ross, Ben, Bloomington
Ross, H. P., Richmond
Ross, Guy, Anderson
Royal, Wm., Indianapolis
Rozelle, C. V., Anderson
Rubin, M. M., Indianapolis
Rudesill, C. L., Indianapolis
Rupel, E., Indianapolis
Rust, B. K., Indianapolis

S

Sabin, A. E., Dana
Sandorf, M., Indianapolis
Sandy, G. L., Martinsville
Sappenfield, R. S., Brookville
Scamahorn, O. T., Pittsboro
Schillinger, R., Richmond
Schreiber, A. W., Lafayette
Schuman, E. B., Bloomington
Schweitzer, A. E., Indianapolis
Scott, W. J., Kokomo
Seaton, G. W., Indianapolis
Sedam, H. L., Indianapolis
Segar, L. H., Indianapolis
Sensenich, R. L., South Bend
Shafer, M. R., Indianapolis
Shanklin, E. M., Hammond
Shimer, Will, Indianapolis
Shoup, H. B., Greenstown
Shoup, H. B., Sharpsville
Shultz, H. M., Logansport
Sicks, O. W., Indianapolis
Simms, G. B., Franakfort
Smallwood, R. B., Bedford
Smiley, J. H., Indianapolis
Smith, B. J., Kingman
Smith, F. B., Indianapolis
Solomon, R. A., Indianapolis
Souter, Martha, Indianapolis
Southard, C. B., Russiaville
Sovine, J. W., Indianapolis
Spencer, M. J., Indianapolis
Spenner, R. W., South Bend
Spohn, E. A., Walton
Stamper, J. H., Middletown
Stamper, L. A., Richmond
Stangle, W. J., Mooresville
Stayton, C. A., Indianapolis
Steele, D. J., Roachdale
Stinson, A. E., Rochester
Stoeffler, W., Indianapolis
Storms, R. B., Indianapolis
Stottlemeyer, S. J., Anderson
Stouder, A. E., Kempton
Stroup, C. C., Bloomington
Stygall, J. H., Indianapolis
Sullivan, J., Terre Haute

T

Tade, E. H., Bicknell
Taylor, M. H., Indianapolis
Teal, Dorothy, Columbus
Terrell, B. J., Indianapolis

Terwilliger, W. S., Indianapolis
Teters, M. S., Middleburg
Thom, Julia, Gosport
Thom, J. W., Gosport
Thompson, C. F., Indianapolis
Thornton, H. C., Indianapolis
Thrasher, J., Indianapolis
Thurston, A., Indianapolis
Thurston, H. S., Indianapolis
Tindall, W. R., Shelbyville
Tinney, W. E., Indianapolis
Toles, C. A., Indianapolis
Tomlinson, C. H., Cicero
Tompkins, C. A., Indianapolis
Totten, E. C., Indianapolis
Tremor, F. S., Indianapolis
Tubbs, G. R., Lafayette
Turley, V., Fowler
Turner, O. A., Madison

V

Vore, L. W., Plymouth

W

Wales, H. L., Indianapolis
Waller, J. I., Knightstown
Warfel, P., Indianapolis
Warvel, J. H., Indianapolis
Waymire, E. S., Indianapolis
Wedel, F. L., Terre Haute
Weil, Harry, Indianapolis
Weinstein, J., Terre Haute
Weldy, B. P., Hartford City
Wells, M. M., Fairland
Weyerbacher, A. F., Indianapolis
Wheeler, H. H., Indianapolis
Wheeler, J. T., Indianapolis
White, C. S., Rosedale
Wiley, W. M., Anderson
Wilhelmus, C. M., Newburg
Williams, B. M., Fort Wayne
Williams, H. O., Indianapolis
Willis, Charles, Evansville
Winters, Matthew, Indianapolis
Wise, Wm., Indianapolis
Wiseman, V. Earle, Greencastle
Witt, L., Indianapolis
Wood, Amelia, Muncie
Wood, Donald, Indianapolis
Woodcock, Chas., Greenwood
Wright, E. D., Seymour

Y

Young, J. B., Indianapolis
Young, L. R., Indianapolis
Young, R. H., Goshen
Yount, Florence, Indianapolis

Z

Zaring, B. K., Columbus
Zink, C. M., Clinton
Zwick, H. F., Decatur

SOCIETIES AND INSTITUTIONS

BUREAU OF PUBLICITY

April 13, 1937.

Present: William N. Wishard, M.D., Chairman; E. V. Hahn, M.D.; F. M. Gastineau, M.D., and T. A. Hendricks, executive secretary.

The release, "Spring Tonics and Spring Fever," approved for publication in Saturday papers, April 24.

Reports on medical meetings:

Feb. 25—Grant County Medical Society, Marion, Indiana. "Protamine Insulin for the Treatment of Diabetes." (25 present.)

March 3—Sullivan County Medical Society, Sullivan, Indiana. "Cardiac Therapy" and clinic. (30 present.)

Requests for speakers:

April 21—Meeting of Summer Round-up Chairmen, 3:30 p. m., Claypool Hotel, Indianapolis. Speaker obtained.

April 21—Parke-Vermillion County Medical Society, Clinton, Indiana. Speaker obtained.

April 27—Daviess-Martin County Medical Society, Washington, Indiana. Speaker obtained.

April 29—Cass County Medical Society, Logansport, Indiana. Request for speaker upon "Protamine Zinc Insulin in the Management of Diabetes Mellitus."

April 29—Ladies' Aid of the Christian Church, Wilkinson, Indiana. Request for speaker upon "Social Diseases."

October—Woman's Auxiliary to the Indiana State Medical Association. Speaker for annual Auxiliary breakfast.

Request made by a physician as to what constitutes an ethical professional card. The Bureau of Publicity stated that a physician's name, his address and telephone number would be permissible upon a card. If the physician limits his practice to a certain specialty, the name of the specialty would also be permissible. However, the Bureau emphasized the fact that a card in itself may be ethical and in good taste and yet the distribution of the cards might be in very poor taste and in conflict with the principles of medical ethics. The Bureau stated that it was inexcusable to send out cards which in any way could be interpreted as a solicitation of business.

The following item in the April *Bulletin* of the Indianapolis Better Business Bureau entitled, "Cancer Quack Advertising Refused," was brought to the attention of the Bureau:

"Recently there unwittingly appeared in the personal column of the classified advertising of a local newspaper the following advertisement: 'Cancer, chronic tuberculosis, arthritis deformans, psoriasis and end-arthritis. Medical fee collected when patient is healed. Address T. N. Walker, secretary, Bicknell, Ind.' It appeared that this advertisement had been running unnoticed. The Bureau received a complaint locally that a George Franklin Smith, who is, unfortunately, a licensed M.D. in this state, offered a cure to a local lady for a serious cancer, providing she put up $250.00 in advance for the first 'injection.' The Bureau immediately took this matter up with the newspaper and further advertising was refused. All papers were notified to be on the look-out for its reappearance.

"The Bureau is not posing as a medical expert, but we believe it is common knowledge in the scientific and medical world that almost any doctor can cure skin cancer, or cancer in its very early stages, if it is recognized and diagnosed in time. We believe that neither George Franklin Smith nor T. N. Walker nor anyone else connected with this clinic at Bicknell, Ind., has any cure for cancer as it is understood by the public, or for chronic tuberculosis, as this advertisement would indicate.

"If they did, their names would unquestionably be emblazoned across the front pages of the world's newspapers, and they would not have to be advertising for clients. We believe that cancer quackery is one of this country's most reprehensible professions."

Letter from the secretary of the Department of Public Health of South Bend, Indiana, asking the Bureau to supply copy for a supplement in one of the South Bend papers on the subject of child health brought to the attention of the Bureau. The Bureau will be pleased to supply the copy for such a supplement if it is in no way connected directly or indirectly with any advertising campaign that accompanies such a supplement.

The secretary was instructed to communicate with the director of the Bureau of Maternal and Child Health and obtain from him a statement as to the number of talks that had been made by physicians both to the laity and to the medical society under the direction of his department.

April 20, 1937.

Present: William N. Wishard, M.D., chairman; F. M. Gastineau, M.D., by proxy, and T. A. Hendricks, executive secretary.

The release, "May Day in Indiana," corrected and approved for publication on Saturday, May 1.

Requests for speakers:

April 21—Meeting of Summer Round-Up Chairmen of the Indiana Congress of Parents and Teachers, 3:30 p. m., Claypool Hotel, Indianapolis. Speaker obtained.

April 21—Parke-Vermillion County Medical Society, Clinton, Ind. Two speakers obtained for this meeting.

April 21—Decatur County Medical Society, Greensburg, Ind. Speaker obtained.

Several weeks ago the Indiana state chairman of the summer round-up sponsored by the Indiana Congress of Parents and Teachers asked for recommendations as to how to obtain the cooperation of the medical profession in these round-ups. This correspondence was turned over to a member of the Bureau of Publicity who wrote a detailed report upon this matter, which report was approved by the Bureau of Publicity. Letter from the director of the Bureau of Health and Public Instruction of the American Medical Association upon this same subject also approved by the Bureau. This report and letter emphasized the fact that if these examinations are to be of any value, they must be real examinations and not merely the lining up of children by social service agencies and allied groups for show and display.

Letter received from the Indiana director of the Bureau of Maternal and Child Health stating that he would be very pleased to appear before the Bureau of Publicity and review the activities of his Bureau in detail.

Postal card received from the Philadelphia County Medical Society in regard to the paper that is to be presented by the president of the Medical Society of the State of Pennsylvania entitled "Dramatic Episodes of Medicine." The Bureau instructed the secretary to write to the president asking him to send the Bureau a copy of this talk.

April 27, 1937.

Present: William N. Wishard, M.D., chairman; F. M. Gastineau, M.D.; E. V. Hahn, M.D., and T. A. Hendricks, executive secretary.

The release, "Postgraduate Course May 10 to 14," approved for publication in Monday, May 3, papers.

Requests for speakers:

April 27—Daviess-Martin County Medical Society, Washington. Speaker obtained.

April 28—Ball State Teachers College convocation and Kiwanis Club luncheon, Muncie. Speaker obtained to talk on "Cancer."

Reports on medical meetings:

April 13—Knox County Medical Society, Vincennes. "The Importance of Pelvic Examination." (20 to 25 present.)

April 14—Parent-Teacher Association, School No. 76, Indianapolis. "Quackery." (80 to 100 present.)

April 21—Summer Round-up Chairmen of the Indiana Congress of Parents and Teachers, Claypool Hotel, Indianapolis. "Cooperation of Medical Profession with Parent-Teacher Group." (125 present.))

April 21—Decatur County Medical Society, Greensburg. "Syphilis." (10 present.)

April 21—Parke-Vermillion County Medical Society, Clinton. "Informal Remarks on Work of Indiana State Medical Association." (15 present.)

The director of the Indiana Bureau of Maternal and Child Welfare is to be invited to the next meeting of the Bureau to review with the Bureau in detail the activities of his organization.

Correspondence with the secretary of the Department of Public Health of South Bend in regard to the health supplement in one of the South Bend papers brought to the attention of the Bureau. The Bureau suggested that a copy of the regular May Day release of the Bureau might serve the purpose.

Material in regard to the summer round-up brought to the attention of the Bureau.

Speaker's Service Bulletin prepared by the Public Relations Bureau of the Medical Society of the State of New York brought to the attention of the Bureau.

LOCAL SOCIETY REPORTS

ADAMS COUNTY MEDICAL SOCIETY held a meeting at Decatur, April sixteenth. Dr. Fred Maurer, of Lima, Ohio, spoke on "Heart Disease—Its Etiology, Diagnosis and Treatment." Twelve members were present.

CARROLL COUNTY MEDICAL SOCIETY held a meeting at Rockfield, May thirteenth. Dr. Frank Walker, of Indianapolis, talked on "Vaginal Discharges—Causes and Treatment." Ten members were present.

CASS COUNTY MEDICAL SOCIETY members held a dinner meeting in Logansport, April twenty-ninth. Eighteen members were present to hear the guest speaker, Dr. John Warvel, of Indianapolis, discuss "Uses of Insulin."

DAVIESS-MARTIN COUNTY MEDICAL SOCIETY met in Washington, April twenty-seventh. Thomas A. Hendricks, executive secretary of the Indiana State Medical Association, was the principal speaker.

DELAWARE-BLACKFORD MEDICAL SOCIETY members met in Hartford City, April twentieth. Members of Blackford County were hosts. Dr. Charles P. Emerson, of Indianapolis, was the principal speaker. Attendance numbered sixty.

ELKHART COUNTY MEDICAL SOCIETY held its regular meeting in Elkhart, April twenty-ninth, with an attendance of fifty. Dr. Robert Moore, of Indianapolis, spoke on "Some Remarks on Acute Cardiovascular Emergencies." The time of the meetings for this society has been changed to the first Wednesday of each month.

FAYETTE-FRANKLIN COUNTY MEDICAL SOCIETY held a meeting in the McFarlan Hotel, Connersville, May eleventh. Dr. John R. Brayton, of Indianapolis, addressed the sixteen members present, his subject being "The Common Skin Diseases of Children."

FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY met in the Chamber of Commerce Building, Fort Wayne, May fourth. Mr. H. C. Dart, manager of the Fort Wayne Better Business Bureau, discussed "The Anatomy of Fraud." Thirty-three members were present.

Members of the Fort Wayne Medical Society went to South Bend, April twenty-first, for a joint meeting with the St. Joseph County Medical Society. Dr. Russell Haden, of Cleveland, Ohio, talked on "Anemia." Fort Wayne visitors traveled to South Bend via chartered bus.

At the regular meeting of the society on April twentieth, case reports were presented by Drs. Lawrence Shinaberry, R. W. Wilkins, C. J. Cooney, and D. D. Johnston. A moving picture on "The Injection Treatment of Hernia" was shown to the forty-seven attendants.

FORT WAYNE ACADEMY OF MEDICINE held its annual dinner meeting at Orchard Ridge Country Club, Fort Wayne, May eleventh. This meeting concluded the activities of the group until next fall. Officers elected are: Dr. W. C. Wright, president; Dr. A. N. Ferguson, vice-president; Dr. A. P. Hattendorf, secretary-treasurer. Dr. Juan Rodriguez and Dr. Eugene L. Bulson were named to the board of trustees to succeed Dr. R. L. Hane and Dr. Lawrence Shinabery, whose terms expired. New officers will be installed at the first fall meeting, September fourteenth.

FOUNTAIN-WARREN MEDICAL SOCIETY met at Perrysville, May fourth, with Dr. P. E. McCown, of Indianapolis, as principal speaker. Dr. McCown's subject was "Application of Electricity in Urology" which was illustrated with slides. A catfish dinner was served to the forty-three attendants.

FULTON COUNTY MEDICAL SOCIETY met at Rochester, May seventh. Dr. Ira Perry, of North Manchester, talked on "Temple Treatment of Eclampsia." Ten members were present.

GRANT COUNTY MEDICAL SOCIETY members met at the Hotel Spencer in Marion, April twenty-second. Dr. Matthew Winter, of Indianapolis, was the guest speaker, his subject being "Pertinent Points in Pediatrics." Attendance numbered twenty-two.

GIBSON COUNTY MEDICAL SOCIETY members met at the Emerson Hotel in Princeton, May tenth, with Dr. Vincent A. Lapenta, of Indianapolis, as guest speaker. Dr. Lapenta's subject was "Research in Medicine." Twenty-two members were present.

HENDRICKS COUNTY MEDICAL SOCIETY members met at Danville, April twenty-second, for a noon chicken dinner. Following the dinner, the principal speaker, Dr. Russell S. Henry, of Indianapolis, presented an illustrated lecture on "Tuberculosis." Attendance numbered sixteen, including the county nurse and officers of the county tuberculosis association.

HOWARD COUNTY MEDICAL SOCIETY held a meeting at Kokomo, May seventh, with Dr. John E. Dalton as principal speaker. Dr. Dalton's subject was "Treatment of Early Syphilis." Attendance numbered twenty.

JASPER-NEWTON COUNTY MEDICAL SOCIETY members met at Rensselaer, April twenty-ninth, for a dinner meeting, with Dr. E. C. English as host. Guest speaker was Dr. F. S. Crockett, of Lafayette, whose subject was "Problems the General Practitioner and Urologist Have in Common." Thirteen members and four guests attended.

KNOX COUNTY MEDICAL SOCIETY and the Knox County Dental Society held a joint meeting in Vincennes, May fourth. J. E. Dalton, M.D., of Indianapolis, talked on "Diagnosis and Treatment of Early Syphilis," and J. T. Waldo, M.D., D.D.S., of Indianapolis, talked on "Infections of the Mouth, Jaw and Face." There were twenty-three members and twenty dentists present.

KOSCIUSKO COUNTY MEDICAL SOCIETY members held a joint meeting with the Marshall County Medical Society at the Hi-Way Inn near Plymouth, May fifth. The Knox county members supplied a humorous program; the Marshall county members supplied a chicken dinner. Attendance numbered twenty-six.

LAFAYETTE ACADEMY OF MEDICINE held its regular monthly meeting at Lincoln Lodge, Lafayette, in May, with Dr. Max Thorek, of Chicago, presenting an illustrated paper on "Electro-surgical Obliteration of the Gall Bladder," and Dr. Phil Thorek discussing "Diagnosis of Gall Bladder Disease." Dr. T. B. Noble, Jr., of Indianapolis, discussed the papers. Attendance numbered sixty-two.

LAKE COUNTY MEDICAL SOCIETY members held their annual meeting on medical economics at the Lake County Tuberculosis Sanatorium, near Crown Point, May thirteenth. Mr. J. D. O'Meara, of Fort Wayne, was the principal speaker, his topic being "The Relationship of Physician and Patient." This completes the programs of the Lake county society until fall.

MARION COUNTY MEDICAL SOCIETY members heard Drs. Walter F. Kelly, William V. Woods, and Rogers Smith at the April twentieth meeting, held in the Hotel Antlers. Subjects were "Back Pain," "Mechanical Causes of Back Pain," and "Neurological Causes of Back Pain."

At the April twenty-seventh meeting, Drs. Charles R. Sowder and Homer G. Hamer were principal speakers, their subjects being "Uremia" and "Renal Damage in Urinary Tract Disease."

More than three hundred persons attended the annual spring frolic of the Indianapolis Medical Society, May fourth, at the Hotel Antlers. The program included dinner, dancing, and bridge. Members of the Seventh District Medical Society were guests.

MONROE COUNTY MEDICAL SOCIETY members and members of the Monroe County Bar Association held a joint meeting in the Graham Hotel, Bloomington, April twenty-seventh, to hear Dr. Louis Segar, of Indianapolis, discuss "Problem Children."

MONTGOMERY COUNTY MEDICAL SOCIETY met at Culver Hospital in Crawfordsville, April twenty-second, for a dinner meeting. A symposium on tuberculosis was presented by Drs. Wemple Dodds, of Crawfordsville, who talked on "Pathology of Tuberculosis"; Dr. Russell S. Henry, of Indianapolis, who discussed "Tuberculin Testing and Diagnosis," and Dr. Paul D. Crimm, of Evansville, who talked on "Treatment of Tuberculosis." Attendance numbered thirty-eight.

MORGAN COUNTY MEDICAL SOCIETY members met in Martinsville, April twenty-first, to hear Dr. William N. Wishard, Jr., of Indianapolis, talk.

NORTHEASTERN INDIANA ACADEMY OF MEDICINE members met in Kendallville, April twenty-ninth, for a dinner meeting. Dr. Louis H. Segar, of Indianapolis, was the principal speaker, his subject being "Pediatric Problems."

PARKE-VERMILLION COUNTY MEDICAL SOCIETY met at the Vermillion county hospital in Clinton, April twenty-first. Dr. A. J. Micheli, of Indianapolis, was the guest speaker.

PORTER COUNTY MEDICAL SOCIETY members met April twenty-seventh at Valparaiso. Dr. Robert N. Wimmer, of Gary, presented a paper on "Newer Points of View in the Treatment of Diarrhea and Intoxication and Dehydration in Infants." Moving pictures on "Diaphragmatic Hernia, Cholecytectomy and Choledochostomy" were presented. The biology class from Valparaiso University was present at the meeting.

PUTNAM COUNTY MEDICAL SOCIETY held its regular monthly dinner meeting April thirteenth at Greencastle. Dr. A. F. Weyerbacher, of Indianapolis, was the guest speaker.

RANDOLPH COUNTY MEDICAL SOCIETY held its monthly meeting, May tenth, at the Randolph County Hospital in Winchester. Dr. J. S. Robison, of Winchester, talked on "Appendicitis."

SHELBY COUNTY MEDICAL SOCIETY members held a meeting in Shelbyville, May fifth. Dr. Foster Hudson, of Indianapolis, was guest speaker; his subject was "Obstetrics."

ST. JOSEPH COUNTY MEDICAL SOCIETY met in the Hotel LaSalle, South Bend, April twenty-first. Dr. Russell L. Haden, of Cleveland, Ohio, was the guest speaker, his subject being "The Study and Treatment of Anemia." Members of the Fort Wayne Medical Society were guests at the meeting.

UNION DISTRICT MEDICAL ASSOCIATION held its semi-annual meeting at Connersville, April twenty-second. Speakers included Drs. Clifford Straehley and Louis G. Herrmann, of Cincinnati, and Drs. George Garceau and W. D. Little, of Indianapolis. The next meeting of the organization will be held October twenty-eighth, in Brookville. Officers of the society are Dr. E. C. Denny, of Milton, president; Dr. R. O. Kennedy, of Rushville, vice-president, and Dr. R. S. Sappenfield, Brookville, secretary-treasurer.

VIGO COUNTY MEDICAL SOCIETY members met in Terre Haute, April thirteenth, with thirty-five in attendance. Dr. J. R. Yung, of Terre Haute, presented a case report. Dr. J. J. Hoover read a paper on "The Underprivileged Doctor."

The May seventh meeting was the combined meeting of the Vigo County Medical Society, the Terre Haute Academy of Medicine, the Fifth District Medical Society, and the Aesculapian Medical Society, held in the Hotel Deming. Dr. W. C. Alvarez, of the Mayo Clinic, was the principal guest speaker.

WAYNE-UNION COUNTY MEDICAL SOCIETY members met at the Richmond-Leland Hotel, in Richmond, April twenty-ninth. Dr. C. O. McCormick, of Indianapolis, was the principal speaker, his subject being "Analgesia in Labor and the Modified Gwathmey Technic." Attendance numbered thirty-eight.

MEDICAL INSPECTION DEPARTMENT, PUBLIC SCHOOLS, GARY, INDIANA

Table Showing Number of Cases of Diphtheria Reported to Board of Health, Number of Deaths from Diphtheria, School Enumeration and Approximate Number of Persons Given Immunization at School 1917 to 1937 (20 years)—Gary, Indiana.

Year	BEFORE IMMUNIZATION No. Cases	No. Deaths	School Enumeration	Approximate No. Given Diphtheria Immunization at School	
1917	122	20	9,811		
1918	202	35	11,167		
1919	128	14	12,137		
1920	120	11	13,447		
1921	214	13	15,331		
1922	65	6	15,217		
1923	101	16	16,664		
1924	95	6	18,438	1,189	24-25
Total (8 yrs.)	1,047	121			
Average per yr.	131	15+			
AFTER IMMUNIZATION (Immunization Began Fall of 1924)					
1925	105	3	20,472	1162	25-26
1926	74	5	23,210	1267	26-27
1927	38	5	24,852	1855	27-28
1928	50	7	26,681	1815	28-29
1929	32	0	27,574	1443	29-30
1930	41	3	28,477	1674	30-31
1931	21	0	28,961	1547	31-32
1932	25	2	28,032	1833	32-33
1933	4	1	None	1800	33-34
1934	5	1	Taken	981	34-35
1935	6	1	"	900	35-36
1936	28	6	"		
Total 12 yrs.)	429	34			
Average per yr.	36	3—			
TOTAL (20 yrs.)	1,476	155			

Immunization of the pre-school age children in Gary has been done by family physicians, and a few have been immunized at the schools. Only a small per cent of the entire pre-school group have had immunization. The above table indicates that by immunizing the school-age group the number of cases and deaths from diphtheria can be greatly reduced. This is contrary to a pronouncement made "down East" that no effect would be shown until one-third of the pre-school age group was reached. Certainly the ideal diphtheria immunization program includes the pre-school age children, but even if it does not include them, we believe the results shown in the above table justify the efforts.

O. B. NESBIT, M.D., *Director.*

THIS IS THE LAST ISSUE OF THE JOURNAL THAT WILL BE SENT TO DELINQUENT MEMBERS.

BOOKS

MODERN TREATMENT OF FRACTURES. By H. Waldo Spiers, A.B., M.D., professor of orthopedic and fracture surgery, College of Medical Evangelists, Los Angeles, Calif. Second edition. 137 pages, profusely illustrated. Cloth. Price $2.00. Wm. Wood and Company, Baltimore, 1937.

A TEXTBOOK OF OBSTETRICS. By Edward A. Schumann, A.B., M.D., F.A.C.S.; Professor of Obstetrics, School of Medicine, University of Pennsylvania, Surgeon-in-Chief, Kensington Hospital for Women, Gynecologist and Obstetrician to Philadelphia General and Memorial Hospitals; Obstetrician to Chestnut Hill Hospital; Consulting Gynecologist to Frankford, Jewish, Burlington County and Rush Hospitals. With 581 illustrations on 497 figures. W. B. Saunders Company, Philadelphia and London. 1936. Price $6.50.

The past year has been a large one for books on obstetrics—revisions and new ones. This is one of the new ones. It is of convenient size, 780 pages with 581 illustrations, and reasonable in price. However, nothing of importance has been sacrificed and "clearness, coherence and unity" has been the author's aim. Dr. Schumann is a teacher and practitioner of obstetrics of long experience and this book is obstetrics as he sees it. Especial attention is paid to the mechanism of labor and the common conditions met in this practice without using much space for controversial subjects. It is up-to-date and the accepted new practices are to be found properly discussed. Exceptionally good are the chapters on puerperal sepsis, forceps deliveries, cesarean section and the hemorrhagic condition.

ABSTRACTS

DRUGS USED IN TREATMENT OF CIRCULATORY FAILURE IN ACUTE INFECTIOUS DISEASES

CARY EGGLESTON, New York (*Journal A. M. A.*, Oct. 10, 1936), states that clinically the usual type of failure appears to be due to loss of peripheral vascular tone, or a vasometer paralysis. Much less commonly the evidence seems to point to a primary failure of the heart. In bacterial endocarditis, acute rheumatic fever and diphtheria, the heart is known to be damaged directly. But even in these diseases there is no unanimity of opinion as to the mechanism of the circulatory failure that may develop. The presence of cyanosis, congestion of the lungs, occasionally some dyspnea, and distention of the veins definitely indicates myocardial failure. But in most instances these are more or less masked by signs and symptoms referable to peripheral vascular failure. The latter include pallor, extreme weakness, sweating, decreased blood pressure, low pulse pressure and rapid, feeble pulse with poor heart sounds; these are the manifestations of shock or collapse. It is now generally accepted that the other acute infections cause little or no direct myocardial damage except the cloudy swelling common to febrile and infectious processes. The circulatory failure in these is concededly of the vasomoter

(Abstract continued from page 324)

type. Caffeine is probably the most widely used drug. Through direct stimulation of the higher portions of the central nervous system, it may diminish the patient's exhaustion and improve his sense of well being. By direct action on the medullary centers, it stimulates respiration and the vasomotor center and may tend thereby to raise the blood pressure and improve vascular tone. Through direct action on the heart muscle, it may raise its tone, increase both the strength and completeness of its systole, promote diastolic relaxation, and, if it does not cause too much acceleration in the heart rate, may result in an increase of the cardiac output. It is generally best administered hypodermically in the form of a sterile solution of caffeine with sodium benzoate. The average single dose lies between 0.3 and 1 gm. Strychnine is believed by some to be valuable, by others to be useless. If it is to be used, it should be administered in doses much larger than are commonly employed. At least 0.002 gm. is required, and single doses of from 0.003 to 0.006 gm. are more certainly effective. It should be administered hypodermically. More certainly effective than any other agent for the promotion of peripheral vasoconstriction is epinephrine. This should be administered in the form of the solution of epinephrine hydrochloride, which may be injected intramuscularly in doses of from 0.6 to 1 cc., or the same doses can be made much more effective, yet safe, if injected slowly and continuously into a vein. For the latter mode of administration, 1 cc. of the solution may be added to a liter of physiologic solution of sodium chloride or to the same volume of 5 per cent solution of dextrose. It is theoretically the best of all available drugs for use in peripheral circulatory failure, for it acts directly on the endings of the vasomotor nerves to produce vascular constriction and elevation of blood pressure, and at the same time it stimulates the heart through the sympathetic nerve mechanism as well as by a probable direct action on the myocardium. It is contraindicated in those patients whose blood volume has been much reduced by loss of water through diarrhea or sweating. Both ephedrine and solution of posterior pituitary have vasoconstrictor actions which result in some elevation of the blood pressure. Unfortunately, in actual practice they have not proved either of much value or very trustworthy, and the too frequent repetition of pituitary may lead to depression of the tone of the vasoconstrictor system with resulting fall in blood pressure. Ephedrine sulphate or hydrochloride may be used in single doses of from 0.03 to 0.1 gm. for an adult. It may be repeated according to the patient's needs, but frequent or large doses often cause rather excessive nervousness and sometimes produce vomiting. Pituitary is best given in a single dose of from 0.5 to 1 cc. of the official solution. Digitalis and strophanthin are of no value in the forms of collapse not due to failure of the myocardium. They are, in fact, often harmful and should be regarded as definitely contraindicated. Camphor and the unofficial substitutes, such as cardiazol or homocamfin, are too untrustworthy to deserve mention. Experience seems to indicate that the most promising plan of treatment should include one or more of the following procedures in addition to such preventive measures as the provision of rest, adequate and balanced diet, sufficient fluids during the course of the acute illness, and the administration of oxygen by nasal catheter or tent when indicated by the presence of cyanosis, anemia or anoxemia. From 50 to 100 cc. of 50 per cent dextrose solution should be administered intravenously once or twice in twenty-four hours. Caffeine or strychnine should be injected promptly at the first evidence of failure. If the loss of fluid and salt has been excessive, slow intravenous infusions of physiologic solution of sodium chloride should be given in amounts of 1 to 2 liters. The heart will not be overtaxed by too large a volume of fluid if the injection is stopped at the beginning of a rise in the venous pressure, which now can be measured easily by the direct manometric method. In cases associated with intense diarrhea, infusions of not over 300 cc. of a 5 per cent solution of sodium chloride may be most valuable. Transfusions of blood, if feasible, may help materially. Only when these measures are unavailing is it wise to resort to the addition of epinephrine to the transfusion or the simultaneous injection of either ephedrine or posterior pituitary.

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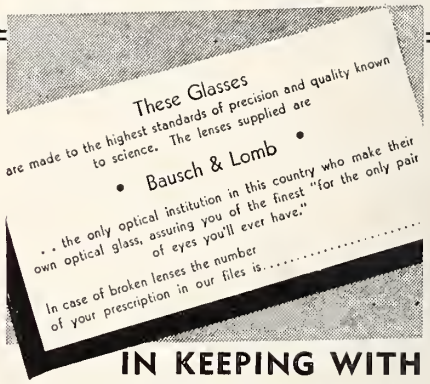
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PROTAMINE INSULIN IN THE TREATMENT OF DIABETES MELLITUS

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Indianapolis

Protamine insulin under the name of protamine insulinate was first used clinically by Hagedorn and his associates in Copenhagen in 1933. The first report of their work appeared in American medical literature[1] early in 1936. A short time later a monograph written by Krarup[2], working under the direction of Hagedorn, appeared in this country. The latter is well written and contains many clinical observations and complete laboratory data on a series of cases studied over a long period of time. Joslin[3,4,5] and his associates have published several articles in the past year, reporting on a large group of cases in which excellent results were obtained with the use of this new insulin compound. Wilder[6] has reported many original findings and furnished a number of valuable suggestions concerning the clinical usage of this preparation. Kerr[7] and his coworkers as well as Rabinowitch[8] and his group have published several articles in the Canadian medical literature. Many other papers have recently appeared in the medical publications in this country in the past few months, so that the literature in regard to this new therapeutic agent is becoming voluminous. In only widely isolated instances have unfavorable reports appeared.

Protamine insulin, or "slow acting" insulin, was introduced for the purpose of allowing better control of the diabetic patient and, if possible, a reduction in the frequency of insulin injections. Both of these objectives have been reached by the use of this new insulin compound. Regular insulin, as obtained at this time, completely spends its effect in four to six hours, and because of this fact several injections are required in the course of twenty-four hours. The more severe the case, the more frequent are the required injections. Many patients are required to take insulin from three to five times daily to keep their blood sugar as nearly normal as possible throughout the twenty-four hour period. Administration of insulin once or twice during the night is oftentimes necessary to prevent unusually high fasting blood sugars and to eliminate the wastage of sugar in the night specimens of urine. Extreme variations in the blood sugar levels in the course of a day are still common, regardless of these frequent injections of regular insulin. These fluctuations persist regardless of changes in the diet, or any special division of the percentage of the total calories per meal. This variability in the blood sugar level is very undesirable and may have much to do with many of the complications presented by the diabetic patient.

Hagedorn and Krarup were able to prevent the night rise in the blood sugar levels and to eliminate the wastage of urinary sugar by the administration of plain protamine insulin. Their method of procedure was to give regular insulin in the morning before breakfast and protamine insulin in the evening. Occasionally they found it necessary to give regular insulin at both the morning and noonday meal with the protamine insulin at suppertime. Their patients appeared to feel better and most of them presented a gain in sugar tolerance. Many cases which could not formerly be controlled were well stabilized on this new type of insulin. We, like many others, were able to duplicate these observations with the plain protamine insulin in a majority of our cases. Nevertheless our results were not as satisfactory as we had hoped. There was considerable variation in the blood and urinary

[1] Hagedorn, H. C.; Jensen, B. Norman; Krarup, N. B., and Wodstrup, I.: Protamine Insulinate. *J. A. M. A.*, **106**:177, 1936.

[2] Krarup, N. B.: Clinical Investigations into the Action of Protamine Insulinate. *G. E. C. Gad*, Copenhagen, 1935.

[3] Root, Howard F.; White, Priscilla; Marble, Alexander, and Stotz, E. H.: Clinical Experience with Protamine Insulinate, *J. A. M. A.*, **106**:180, 1936.

[4] Joslin, E. P.: Diabetes Today and Tomorrow. *Ann. Int. Med.*, **10**:179 (August), 1936.

[5] Joslin, E. P.; Root, H. F.; Marble, Alexander; White, Priscilla; Joslin, A. P., and Lynch, G. W.: Protamine Insulin. *New England J. Med.*, **214**:1079, 1936.

[6] Sprague, Randall O.; Blum, B. B.; Osterberg, A. E.; Kepler, Edwin J.; and Wilder, R. M.: Clinical Observations with Insulin Protamine Compound. *J. A. M. A.*, **106**:1701, 1936.

[7] Kerr, R. B.; Best, C. H.; Campbell, W. R.; and Fletcher, A. A.: Protamine Insulin, *Canad. M. A. J.*, **34**:400, 1936.

[8] Rabinowitch, I. M.; Foster, J. S.; Fowler, A. F.; and Corocoran, A. C.: Clinical Experiences with Protamine-Zinc-Insulin and other Mixtures of Zinc and Insulin in Diabetes Mellitus. *Canad. M. A. J.*, **35**:239 (September), 1936.

findings from day to day on the same patients using a controlled hospital diet and constant insulin dosage. Frequent and even recurrent insulin reactions were observed during the night when we attempted to give sufficient protamine at suppertime to keep the blood sugar down to normal for the subsequent twelve-hour period. These reactions were often atypical and occasionally extremely severe. In some cases glucose had to be given intravenously as often as two or three times during the night.

Protamine calcium insulin became available later and this gave more constant results with much better control of the diabetes. In some of the younger patients we were able to control the blood sugar twenty-four hours a day and at the same time avoid hypoglycemic reactions. Quite a few of these patients appeared to do better with this type of insulin than they did when given protamine zinc insulin at a later date. It was our observation that cases which presented a fairly rapid rise in the blood sugar after the taking of food, and who at the same time did not present so much of an elevation in the blood sugars after midnight, seemed to do well with the calcium preparations. Protamine zinc insulin became available a few months later and this proved to be much more satisfactory than the other types of protamine with which we had been supplied previously. This protamine zinc preparation is more slowly absorbed from the tissues and appears to be released at a more constant rate, thereby maintaining the blood sugar at a normal level over a period varying from twelve to thirty hours. Hypoglycemic reactions have not been so frequent with this material, and as a rule not so severe. However, one or two patients which we have observed recently have presented rather marked reactions. In addition to better control of the diabetes, more rapid stabilization can be obtained with this material than with the other forms of protamine insulin.

This slower acting preparation of protamine insulin with zinc seems to work most effectively when given one hour before breakfast. However, at times it is necessary to administer it both before breakfast and before the evening meal. A majority of adult cases, in whom the dosage of regular insulin does not exceed thirty-five or forty units per day, can be carried along very nicely on a single injection of protamine insulin in the morning. This does not hold true in juvenile diabetics, as they most frequently require a moderate amount of regular insulin in addition to the protamine insulin before breakfast. Many of these younger patients may be required to take a small dose of regular insulin at suppertime in addition to the two types of insulin before the morning meal. However, we have been able to eliminate the midnight dosage of insulin in every case. In the younger patients it appears that the regular insulin in the morning takes care of the breakfast before the protamine begins to be absorbed from the tissues. The latter, however, begins to be effective by noon and will usually take care of the lunch and evening meal. The continued absorption of the protamine also prevents the rise in the blood sugar after midnight, so that fairly low fasting blood sugars are obtained. Each patient requires individualization of dosage as determined by frequent blood sugars and repeated examinations of single or six-hour specimens of urine.

Chart No. 1 demonstrates the manner in which a new case with a mild diabetes can be quickly brought under control by the use of protamine insulin alone. It also illustrates the rather marked gain in sugar-tolerance, with the necessary reduction in insulin dosage, which often occurs in the course of a few weeks after these patients are placed on protamine insulin.

Chart No. 2 shows one method in which the transfer from regular to protamine insulin may be safely undertaken. There is a gradual substitution of the protamine for the regular insulin. This will prevent the diabetes from getting out of control and also eliminate the possibility of hypoglycemic reactions. Protamine in this case was given first in the evening to do away with the high fasting blood sugars, and after a few days was given before the morning meal. This case presents a moderate reduction in insulin requirement and the elimination of two injections of insulin per day. There is also a definite reduction in the blood sugar levels. Regular insulin was later discontinued in this case and the patient was controlled with a dose of 35 units of protamine insulin before breakfast.

Chart No. 3 demonstrates the gradual change from regular to protamine insulin in a moderately severe diabetic. In this patient rather high fasting blood sugars were noted, even though insulin was given each night at midnight. The protamine in this case was also given first before supper and then transferred to the morning meal. There is a definite saving in insulin unitage in this case. This patient presented an extremely toxic goiter and was later operated. The protamine insulin was continued throughout the operative and postoperative periods and in addition sufficient regular insulin was given to take care of the glucose solutions given intravenously. The diabetes seemed to be more easily controlled postoperatively than similar cases in which regular insulin alone was used.

Many cases do not require the gradual substitution of protamine for the regular insulin; in fact, the majority of our milder cases were transferred immediately from regular to protamine insulin. This transfer can be carried out satisfactorily through office visits. We usually advise these milder diabetics to take one and one-fourth times as much protamine before breakfast as they are taking in their combined dosage of the regular insulin per day. We suggest that these patients test their urine before meals and at bedtime daily for the first seven to ten days. If all of their specimens become sugar-free, we recommend that the dosage of protamine be reduced five units every other day

DATE	INSULIN DOSAGE BREAKFAST	LUNCH	SUPPER	DIET	BLOOD SUGAR	URINARY SUGAR
DEC. 10 1936					366 - 3 PM	GRAMS WASTE 180
DEC. 26				CARBOHYDRATE RESTRICTION	270 - 4 PM	GRAMS WASTE 5 10
DEC. 29	10 REG. 20 PROT.			C - 100 P - 60 F - 120		GRAMS WASTE 5
DEC. 30	25 PROT.			C - 120 P - 70 F - 120	125 - 7 AM 166 - 4 PM	NONE
JAN. 1 1937	30 PROT.			C - 140 P - 80 F - 130	226 - 10 PM	NONE
JAN. 2 ★	35 PROT.			C - 140 P - 80 F - 130	90 - 7 AM 161 - 10 PM	NONE
JAN. 19	35 PROT.			C - 140 P - 80 F - 130	84 - 2 PM 59 - 11 AM	NONE
MARCH 2	20 PROT.			C - 175 P - 80 F - 130	86 - 11 AM 147 2 PM	NONE
	16 PROT.			C - 175 P - 80 F - 130		
	MRS. M. M. AGE - 53 PROTAMINE INSULIN WITH ZINC				★ LEFT HOSPITAL TAKING 35 UNITS	

Chart No. 1.

DATE	INSULIN DOSAGE BREAKFAST	LUNCH	SUPPER	NIGHT	BLOOD SUGAR	URINARY SUGAR
DEC. 9 1936	15 REG.	10 REG.	12 REG.			GRAMS WASTE 5
DEC. 10	16 REG.	10 REG.	10 REG. 10 PROT.		242 - 7 AM	GRAMS WASTE 5
DEC. 11	16 REG.	10 REG.	10 REG. 15 PROT.			NONE
DEC. 12	16 REG.	10 REG.	10 REG. 10 PROT.			GRAMS WASTE 5
DEC. 13	14 REG. 20 PROT.		12 REG.			GRAMS WASTE 5
DEC. 14	15 REG. 35 PROT.		14 REG.		224 - 7 AM 194 - 4 PM	GRAMS WASTE 5
DEC. 15	15 REG. 35 PROT.		14 REG.		66 - 10 PM	NONE
DEC. 16	10 REG. 35 PROT.		6 REG.		82 - 7 AM 148 - 4 PM	NONE
DEC. 31	12 REG. 35 PROT.				34 - 11 AM 70 - 2 PM	NONE
	MR. C. C. AGE - 70 DIET C-100 -- P-70 -- F-130 PROTAMINE INSULIN WITH ZINC					

Chart No. 2.

Date	Insulin Dosage				Blood Sugar	Urinary Sugar
	Breakfast	Lunch	Supper	Night		
Nov. 21 1936	20 Reg.	10 Reg.	12 Reg.	10 Reg. at Midnight	338 - 7 AM 74 - 4 PM	Grams Waste 5 10
Nov. 22	20 Reg.	10 Reg.	10 Reg. 10 Prot.	6 Reg. at 1 AM		Grams Waste 5 10
Nov. 23	16 Reg.	8 Reg.	10 Reg. 15 Prot.	4 Reg. at 1 AM	210 - 7 AM	Grams Waste 5
Nov. 24	16 Reg.	8 Reg.	10 Reg. 20 Prot.			Grams Waste 5
Nov. 25	20 Reg. 20 Prot.	6 Reg.	8 Reg.		322 - 7 AM	Grams Waste 5 10 15
Nov. 26	18 Reg. 25 Prot.		12 Reg.			Grams Waste 5 10
Nov. 27	12 Reg. 25 Prot.		8 Reg.		192 - 7 AM 168 - 4 PM 54 - 11 PM	Grams Waste 5 10
Nov. 28	10 Reg. 25 Prot.		8 Reg.		137 - 7 AM	Grams Waste 5
Nov. 29	10 Reg. 25 Prot.		10 Reg.		137 - 11 AM 182 - 10 PM	Grams Waste 5
Mrs. M. F. Age 40 Diet C-90--P-70--F-130 Protamine Insulin with Zinc						

Chart No. 3.

until the tests made in the middle of the forenoon show a faint trace of sugar. The patient by this time is usually taking from one-half to two-thirds of the total unitage that was necessary while using the regular insulin. We feel that if patients show a trace of sugar before lunch, and in the mid-afternoon, but are sugar free at bedtime and upon arising, they are under very satisfactory control. Cases in which all single voidings are sugar-free are very likely to have extremely low blood sugars around 4 o'clock in the afternoon and before retiring. It is oftentimes best, in order to prevent reactions in the late afternoon and during the night, to have patients take a small amount of food such as crackers and milk, or a small orange, at about 4 o'clock in the afternoon and at 9 o'clock in the evening.

Chart No. 4 illustrates a case which is best controlled with a fairly large dose of protamine before breakfast and supper, in addition to a small dose of regular insulin with the morning meal. Patients who require such a combination of regular insulin and protamine insulin before any meal should be instructed to inject the regular insulin first and the protamine insulin second. If this order is reversed, there is sufficient protamine left in the syringe to convert the regular insulin into protamine insulin, which results in a failure to overcome a marked rise in the blood sugar one or two hours after the following meal. It is also well to instruct these patients not to inject the two types of insulin at the same site, as there may be admixture of the two forms of insulin in the tissues so that all of the insulin again becomes protamine insulin. It is best to separate the two points of injection by a space of at least two inches. It is obvious that both types of insulin cannot be given in the same syringe at the same time.

Chart No. 5 is a summary of observations on 53 cases taking a combination of regular and protamine insulin. There is a reduction in the frequency of insulin injections in all decades, with no definite saving in the number of insulin units required. In a majority of the cases there is much better control of the diabetes and the patients all appear to be improved clinically and state that they feel much better than they did on regular insulin. The majority of cases in this series were patients in the first to fourth decades in life. They represent the more severe diabetics and because of this fact they require both regular and protamine insulin. The milder the diabetes the less time required to transfer the patient from regular to protamine insulin. Only one case in this series was started on protamine alone. This patient, a girl of four years, was later placed on a combination of regular and protamine insulin. An equal number of the cases in this group were handled through the hospital and through the office. Six of these cases could not be as satisfactorily controlled as they had formerly been on regular insulin, and for this reason they were returned to the old type of insulin. The reason for return to regular insulin, in most of these cases, was the rather marked hypoglycemic reac-

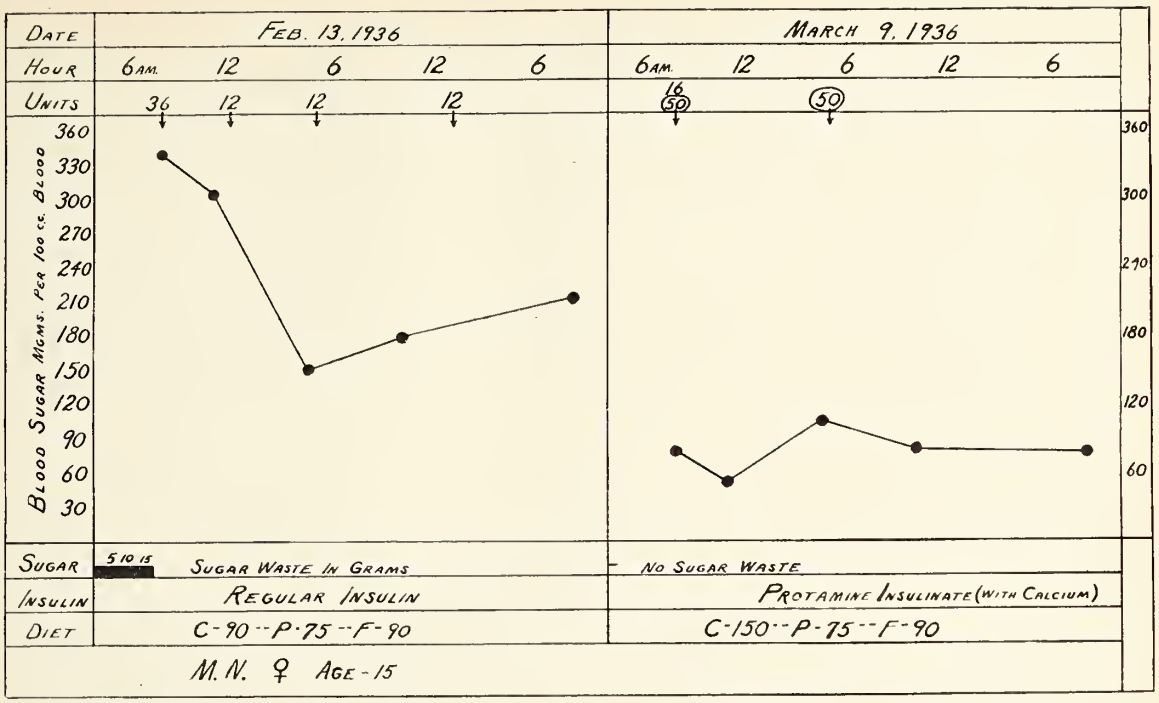


Chart No. 4.

tions during the night. About seventy per cent of these patients show a gain in sugar tolerance at the end of six months' observation.

Chart No. 6 outlines the findings on 61 patients who were transferred from regular insulin to protamine insulin alone. Most of these patients were in the sixth to eighth decades in life. The average length of time that these patients have been on protamine is less than that noted in Chart No. 5, because of the fact we did not begin to use protamine on milder cases until we had given it a rather extensive trial on the more severe diabetic patients. The time required to transfer these patients from regular to protamine insulin is very brief. All of these cases have been able to get along very satisfactorily on a single dose of protamine per day. In each decade, except the fourth and fifth, there is a definite reduction in insulin requirement. About twenty per cent of these cases were new patients who were started primarily on protamine insulin, having never received the regular insulin. The majority of these patients were stabilized through office visits alone. The greater percentage of them showed marked improvement in their general condition in addition to their gain in carbohydrate tolerance.

CHART No. 5. PATIENTS TAKING BOTH PROTAMINE INSULIN AND REGULAR INSULIN

Decade	1	2	3	4	5	6	7	8	Total
Number of cases	5	12	13	9	8	3	3	none	53
Sex:									
Male	1	3	1	5	4	0	2	....	16
Female	4	9	12	4	4	3	1	....	37
Average number of months on protamine insulin	6.1	6.4	8.6	4.6	5.0	6.1	8.8	....	6.5
Average number of days to transfer	5.1	5.7	4.6	5.2	3.1	2.3	....	....	4.3
Average number of injections:									
On regular insulin	3.2	3.0	3.5	3.2	3.7	3.0	3.0	....	3.2
On protamine insulin	2.6	2.1	2.2	2.0	1.8	1.2	1.1	....	1.9
Average number of units per day:									
On regular insulin	31.5	37.3	46.6	35.5	49.2	32.0	39.3	....	38.7
On protamine and regular insulin:									
Protamine	15.4	28.9	28.1	28.8	24.5	22.3	22.8	....	24.7
Regular	12.4	21.1	18.3	9.2	18.1	23.3	15.6	....	16.9
Total protamine and regular	27.8	50.0	46.4	38.0	42.6	45.6	38.4	....	41.2
Number of cases started on protamine insulin	1	0	0	0	0	0	0	....	1
Number of cases transferred to protamine insulin	4	12	13	9	8	3	3	....	52
Number of cases started in hospital	2	3	8	5	6	0	2	....	26
Number of cases started in office	3	9	5	4	2	3	1	....	27
General Condition:									
Improved	4	6	8	6	8	2	3	....	37
Unimproved	0	3	2	2	0	1	0	....	8
Not satisfactory	1	3	1	1	0	0	0	....	6
Tolerance:									
Gain	4	5	10	5	6	2	3	....	35
No gain	1	6	2	2	0	0	0	....	11
Undetermined	0	1	1	2	2	1	0	....	7

CHART No. 6. PATIENTS TAKING PROTAMINE INSULIN ALONE

Decade	1	2	3	4	5	6	7	8	Total
Number of cases	none	5	6	2	9	22	14	3	61
Sex:									
Male	....	4	3	2	2	10	6	2	29
Female	....	1	3	0	7	12	8	1	32
Average number of months on protamine insulin	....	5.0	3.8	4.2	3.7	3.4	3.0	....	3.8
Average number of days to transfer	....	3.0	3.0	1.0	1.2	1.8	1.3	....	1.8
Average number of injections:									
On regular insulin	....	2.0	2.6	1.5	2.1	2.3	2.7	2.5	2.2
On protamine insulin	....	1	1	1	1	1	1	1	1
Average number units per day:									
On regular insulin	....	21.0	34.4	7.5	19.7	22.0	24.4	22.0	21.5
On protamine insulin	....	16.5	21.6	13.0	20.2	21.9	22.2	20.0	19.3
Number of cases started on protamine insulin	....	2	1	0	2	3	3	0	11
Number of cases transferred to protamine insulin	....	3	5	2	7	19	11	3	50
Number of cases started in hospital	....	3	2	0	2	7	8	2	24
Number of cases started in office	....	2	4	2	7	15	6	1	37
General Condition:									
Improved	....	5	6	2	7	19	10	2	51
Unchanged	....	0	0	0	1	3	3	0	7
Not satisfactory	....	0	0	0	1	0	*1	*1	3
Tolerance:									
Gain	....	4	6	0	7	18	8	2	45
No gain	....	0	0	0	0	0	*1	*1	2
Undetermined	....	1	0	2	2	4	5	0	11

* Deceased

Chart Number 7 shows typical blood sugar curves in the case of the same individual when several different types of insulin were used. This patient received a constant diet and a uniform daily insulin dosage of 60 units of the various insulin preparations throughout. In each case, the insulin was given in one injection, one hour before breakfast. Several days were allowed to elapse between tests in order to prevent any hold-over effect from the previously administered insulin.

Observe in the case of regular insulin the high fasting blood sugars with the sudden fall soon after the injection of the insulin, followed by the marked rebound during the afternoon and evening. Compare the definite retarding effect upon changes in blood sugar levels while using regular insulin to which zinc had been added.

In the third column is shown the result when crystalline insulin was employed. Note that this curve and the curve for the regular insulin to which zinc had been added are fairly similar.

Column four illustrates a curve using protamine insulin to which calcium had been added, and the fifth column illustrates the use of protamine zinc insulin. In comparing these latter two types, it was observed that there was a more immediate effect from the protamine calcium preparation, whereas the protamine zinc insulin was charac-

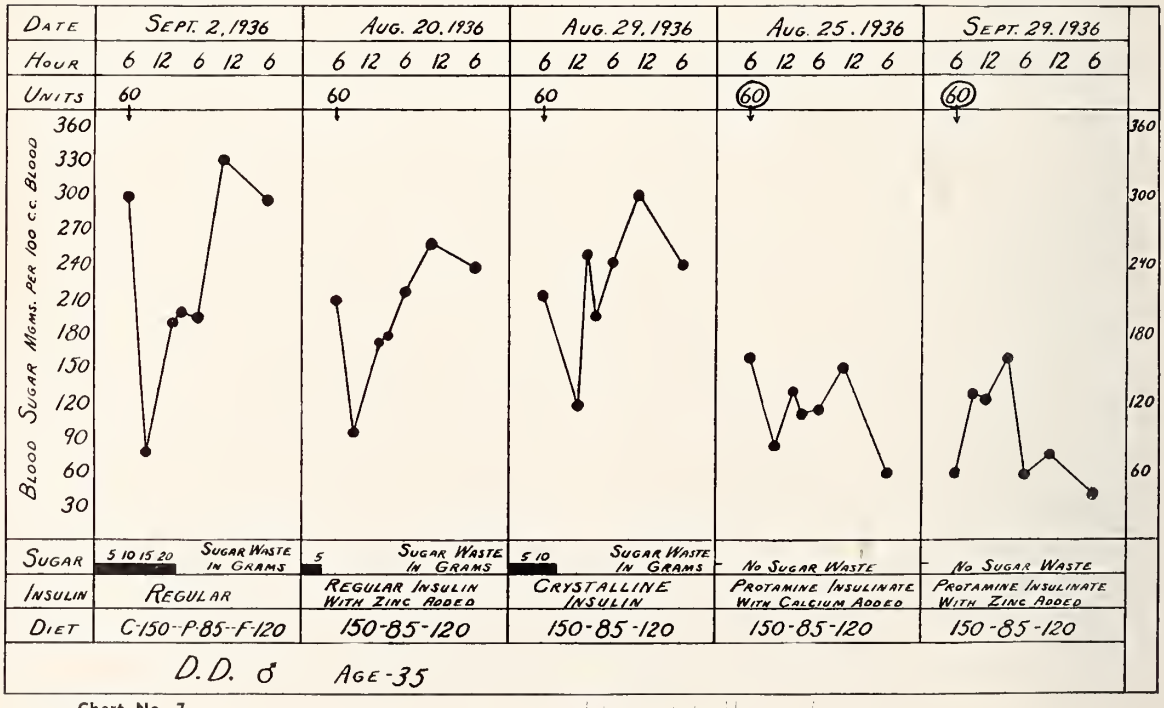


Chart No. 7.

terized by little immediate action and resulted in a greater delayed effect.

There have only been two deaths among the patients receiving protamine insulin. One death occurred in a woman, 84 years of age, who had been on regular insulin for eight years. Her diabetes had been under good control and the reason for the transfer to protamine was for the reduction in the frequency of insulin injections. Her blood sugars were quite low shortly after she was placed on protamine, and she began to develop some hallucinations which we thought were due to low blood sugars during the night. Her mental state became more marked until she presented a definite psychosis. In the course of a few weeks she developed a fever, neck rigidity, and loss of reflexes. She later passed into a stupor, and a spinal puncture was done. She had a high cell count with many lymphocytes and some globulin. She developed a true encephalitis which was the immediate cause of her death. It is quite likely that her early mental changes were due to her infection and not to the low blood sugars. The other fatal case was a patient who entered the hospital in severe acidosis. He had at no time previously received any treatment for his diabetes. He presented an infectious type of gangrene, associated with fever, and a positive blood culture for streptococcus pyogenes. His leg was amputated and he lived for a period of seven weeks and then died of a septic pneumonia. Protamine insulin was given to this patient immediately following operation and continued until the time of his death. His diabetes was well controlled throughout this period.

Only one case has developed acidosis while using protamine insulin. This occurred in a boy, six years old, who had an acute sore throat followed by a bilateral otitis media. The mother had been previously instructed to give regular insulin, in addition to the protamine insulin, if any infection should occur. This she neglected to do and the boy presented a severe acidosis upon his admission to the hospital. The amount of regular insulin required for the relief of his symptoms was considerably less than we believed would have been necessary had he not been receiving protamine insulin up until the time this crisis developed. This patient received both regular insulin and protamine insulin for the relief of his acidosis.

Reactions as previously mentioned still occur and we observed a very severe hypoglycemic shock in one of our patients a short time ago. This patient, a man of 47 years, had been well stabilized on regular insulin for about eight years. He followed his diet closely and took his insulin regularly. He seldom ever presented a glycosuria and had very few hypoglycemic reactions. He was transferred from a regular insulin dosage of 15 units in the morning and 10 units before the evening meal to 30 units of protamine insulin before breakfast. This change was made in order to eliminate one injection of insulin per day. He was advised to report for blood sugar examinations in about two weeks, but was not heard from for a period of about three months. One evening, after some rather strenuous exercise, he developed a severe hypoglycemic reaction characterized by unconsciousness and convulsions. He was given glucose intravenously and regained consciousness very quickly. He was then advised to eat his evening meal and to take additional glucose before retiring. Three hours after his supper he again passed into unconsciousness and developed clonic convulsions and a trismus during which his tongue was severely lacerated. He was again given glucose intravenously but did not regain consciousness. Injections of glucose were repeated several times and small doses of adrenalin were given subcutaneously. The symptoms were not relieved and the patient was sent into the hospital where he was found to have a blood sugar of 360 milligrams per 100 cc. of blood. Because of the fact that the convulsions were becoming more frequent and more severe, six and one-half grains of sodium amytal were given intravenously. This controlled the convulsions for a period of about two hours, when they again returned. Sodium amytal in the same dosage was repeated intravenously. Examination of the eye grounds at this time showed a marked choking of both disks. A spinal puncture was done and the manometer reading was 1 millimeter of mercury. The fluid drained very slowly from the needle. Sucrose in 50 per cent solution was given in doses of 50 to 100 cc. intravenously every four hours. The patient did not regain consciousness until the next morning. This did not appear to be due to the sodium amytal administered. The patient was unconscious four and one-half hours before the first sodium amytal was given and did not have a return of consciousness until five hours after this medication. The blood sugar taken the next morning, after the return of consciousness, showed only 40 milligrams of sugar per 100 cc. of blood. We feel that this patient's life was saved by the administration of sodium amytal to control the convulsions and sucrose to relieve the cerebral edema. Reactions of this type are likely to occur in other patients because of the marked gain in carbohydrate tolerance which many patients present while receiving protamine insulin. The majority of our patients, after a period of three to nine months, show a saving of 25 to 50 per cent in their insulin requirement.

Reactions of a mild nature are frequently observed, the most common symptom being headache. This oftentimes is present in the morning when the patient awakens, and may remain throughout the day, or it may disappear and return one or more times throughout the course of the twenty-four hours. The next most common symptom is a feeling of lassitude, also weakness after slight exertion. Hunger and excessive perspiration are not so commonly noted as in hypoglycemic reactions observed following the use of regular insulin. Cir-

cumoral pallor is often present. Mild reactions are quite common, so that at the present time we are more concerned in preventing this condition than in trying to control the diabetes. It appears to be much easier to control the hyperglycemia and glycosuria than it is to prevent these unpleasant reactions which the patients most frequently experience during the night or in the early morning hours. The patients have less warning of a reaction than with the regular insulin, and for this reason some of them may become markedly severe before the necessity for glucose is ascertained.

The most of our patients are using much higher carbohydrate diets than formerly, requiring less insulin, and they are taking fewer injections and feeling much better than they did when using regular insulin. We have had fewer infections than formerly. There has been a definite decrease in the number of patients showing acidosis or coma. No case in the past eighteen months while using protamine insulin has developed gangrene. We have not observed a single case of apoplexy or coronary thrombosis. We have not encountered anginal pain from hypoglycemia.

There has been and still is considerable fluctuation in the blood sugar levels, and unexplainable periods of glycosuria which come and go without change in the diet, insulin dosage, or activity of the patient. Just what is responsible for these temporary periods of loss of control we are unable to state. Most of the patients soon readjust themselves without any appreciable change in their diet or insulin. It may be that the rate of absorption at the different sites of injection is responsible for these variations. Injections which are made proximal to the larger vessels may result in more rapid absorption and a more fleeting duration of effect from the protamine. Why this loss of control should last over a period of several days we are at a loss to understand. It is also likely that slight changes in the Ph concentration of the tissues may have something to do with the rate of absorption of the protamine.

Protamine insulin has proved most gratifying in the treatment of the diabetes in the majority of our patients up to the present time. Many cases in which satisfactory control had never been obtained over a period of years with regular insulin have become well stabilized with the protamine preparations. The improvement in the general physical condition and the avoidance of multiple injections have proved to be a source of great satisfaction to the patient.

It appears that protamine insulin, like regular insulin, has not simplified the treatment of diabetes. Actually its use requires more time and study, more individualization of treatment, and more effort on the part of the physician to obtain the desired results than does the use of regular insulin. However, the improvement in the patient more than repays the physician for this added time and effort.

613 HUME MANSUR BUILDING.

SCARLET FEVER*

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Clinical observations concerning scarlet fever have formed the basis of numerous reports since the 17th century when the disease was recognized as a clinical entity. More than a century and a half elapsed between separation of scarlet fever from other acute contagions accompanied by rashes and the beginning of bacteriologic investigation into its cause. During this period, clinical observation established certain facts concerning the disease, facts with which any theory of etiology must be compatible in order to be accepted.

The contagious nature of scarlet fever was early established, and it was learned that one attack usually confers a lasting immunity, but that relapses and second attacks may occur.

Clinical experience taught that the contagiousness of scarlet fever lasts beyond the acute stage, being more nearly coincident with the time required for desquamation.

It was learned that survival of the acute stage of scarlet fever does not ensure against death from complications or sequelæ.

It was noted that some persons go through life without having a recognized attack of scarlet fever despite repeated exposure to the contagion.

The disease was found to vary greatly in severity in the various epidemics and in different individuals in the same epidemic.

The fact that discharges are contagious became accepted.

The sudden onset with vomiting, diarrhea, high fever, and in the more severe cases, coma or delirium, were recognized as evidence of intoxication and, because of them, clinicians came to speak of the "poison" of scarlet fever and, later, of the "toxic" forms of the disease.

Scarlet fever in infants was recognized as sufficiently rare to justify reporting, and the medical literature from the time of Sydenham to the present contains numerous descriptions of scarlet fever in infants and even of intra-uterine scarlet fever.

Many references are also found to the importance of the puerperal uterus and of wounds as atria of infection, resulting in puerperal or surgical scarlet fever.

It was not until 1903 that the work of Schottmueller enabled bacteriologists to differentiate hemolysing streptococci from those which produce green on blood. Following Schottmueller's work, it was learned that it is the hemolytic type which predominates in erysipelas, puerperal sepsis, pyogenic infections, septic sore throat, and scarlet fever.

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† From the McCormick Institute of Research.

The association of streptococci with scarlet fever led some scientists to the opinion that they were the cause of the disease, but attempts at treatment with antistreptococcus serums, including Moser's of 1902, failed. Streptococcus vaccines, of which Gabritchewski's was the most extensively tried, likewise failed in both the prevention and treatment.

All attempts to produce experimental scarlet fever were unsuccessful. These experiences, together with the finding of streptococci in other diseases, resulted in the view that scarlet fever was caused by an unknown organism or filterable virus and that streptococci were important but secondary invaders.

As a whole, reports of laboratory investigations in scarlet fever, in contrast to results of clinical observations, proved to be confusing when they were not actually misleading.

Thus in 1912, when we began work on scarlet fever, two centuries after Sydenham, the etiology of the disease was still unknown.

Experimental scarlet fever had not been produced. After several years of unsuccessful attempts to obtain acceptable experimental scarlet fever in animals, using a variety of organisms and materials, we concluded that laboratory animals are not susceptible and that to determine the causative organism, it would be necessary to inoculate human volunteers.

In 1923 we reported the successful production of scarlet fever in human volunteers. The experimental disease was produced by swabbing the throat with pure cultures of hemolytic streptococci isolated from typical cases of scarlet fever. By suitable experiments, we were able to exclude a filterable virus as the cause of the experimental disease. We succeeded in meeting all the requirements of Koch's laws, and thus established a specific hemolytic streptococcus as the etiologic organism of scarlet fever.

This work was subsequently confirmed by Nicolle, Conseil and Durand of the Pasteur Institute in Tunis, and by Toyoda, Futago, and Okamoto in Manchuria. Both groups of workers were able to repeat the experiments in which scarlet fever was produced by inoculation with pure cultures of hemolytic streptococci and excluded a filterable virus as a cause of the experimental disease.

Since hemolytic streptococci are found in the throats of scarlet fever patients but are seldom present in the blood stream of uncomplicated cases, it is evident that the rash is not produced by direct action of the streptococcus on the skin. This indicated that the hemolytic streptococcus growing in the throat might produce a soluble substance which in turn is responsible for the rash, and would explain the "unknown poison" of the disease mentioned in the old clinical reports.

Sterile filtrates were prepared from cultures of the organisms which had produced experimental scarlet fever. When these filtrates were injected intradermally in proper dilution, they caused localized areas of erythema in 41.6 per cent of persons giving no history of scarlet fever, while all of the convalescent scarlet fever patients tested showed negative or only slightly positive reactions.

In persons who showed positive reactions, the effect of the filtrate was inhibited by serum from convalescent scarlet fever patients mixed with the filtrate before it was injected, or by large amounts of convalescent scarlet fever serum injected intramuscularly before the skin test was made.

It was found that this skin reaction, which was positive before an attack of scarlet fever, was negative during convalescence.

When some of the persons with positive skin reactions received injections of larger amounts of the sterile filtrate, they developed nausea, vomiting, fever, and a generalized scarlatinal rash. Following this, the reaction of the skin to the filtrate was modified or negative, and the blood serum of these persons was found to have acquired the property of neutralizing the action of the filtrate, similar to the neutralizing power of convalscent scarlet fever serum.

When graduated doses of the filtrate were injected into horses, the serum of these animals likewise acquired the property of neutralizing the filtrate in vitro.

The negative skin reactions in convalescent patients; the neutralization of the filtrate by convalescent serum; the occurrence of scarlatinal rashes accompanied by other symptoms characteristic of scarlet fever following injection of the sterile filtrate; the short interval between injection of filtrate and beginning of the reaction (about four hours as compared with an incubation period of forty-eight hours in experimental scarlet fever); rapid disappearance of the symptoms; failure of the filtrate to produce the disease itself in persons who subsequently developed scarlet fever on inoculation with living streptococcus—indicated that the action of the filtrate is due to a soluble toxic substance specific for scarlet fever and not to a filterable virus.

Neutralization of this toxic substance by scarlet fever convalescent serum, and by the serum of persons immunized by graduated doses of the filtrate; specific neutralization in vitro of the toxic substance by the serum of horses immunized to the filtrate; and the thermolability — proved that the substance is a true toxin capable of inducing the formation of antitoxin.

It had been thought that true toxins were concerned in comparatively few diseases such as diphtheria, tetanus, botulism, and some forms of dysentery, all of which are caused by bacilli. The manufacture of soluble toxin by streptococci was a new conception. It explained the toxemia and the lasting immunity which had been considered incompatible with a streptococcus origin.

The discovery of scarlet fever toxin opened a new field for investigation in which many workers

recently have been engaged with the result that soluble toxins produced by hemolytic streptococci concerned in various diseases have been described, and in some instances the corresponding antitoxins have been produced. While it is not yet possible to determine what the final status of the various toxins and antitoxins will be, it seems to be established that the hemolytic streptococci found in erysipelas, septic sore throat, and at least some of those concerned in puerperal sepsis are capable of elaborating soluble toxin. The nature of these toxins is a matter of active interest at present.

Different strains of scarlet fever streptococci vary considerably in the potency of toxin yielded. However, the toxin produced by scarlet fever streptococci is of much higher potency than toxins obtained from streptococci found in erysipelas, septic sore throat, and non-scarlatinal puerperal sepsis. The weakness of these non-scarlatinal toxins makes study of their specificity technically difficult because they must be used in low dilutions containing relatively high amounts of foreign proteins which in themselves tend to cause confusing skin reactions. This necessitates the use of medium containing a minimum amount of foreign protein.

Other points to be kept in mind in the study of streptococcus toxins are:

First. The employment of serum containing only one kind of antitoxin. It should be remembered that hemolytic streptococcus infections are common both in animals and in man; consequently a convalescent human serum or an artificially produced antitoxic serum may contain more than one kind of antitoxin. In fact, the accidental or intentional presence of more than one kind of antitoxin in commercial serums is so common as to make them unsuitable for research. Serums for this purpose should be specially prepared.

Second. Preliminary standardization of both toxin and antitoxin. This is necessary because the neutralization reaction is quantitative as well as qualitative.

Third. Adequate control tests to eliminate errors due to reactions caused by protein in the medium or in the serum employed as antitoxin.

Fourth. Use of only those individuals as test subjects who are known to be susceptible to the toxins under investigation.

In a series of experiments, arranged in accordance with these considerations and extending over three years, we were able to demonstrate that the soluble toxins produced by scarlet fever streptococci and by erysipelas streptococci are specific and distinct. These results are in accord with conclusions derived from clinical experience in the two diseases.

In the application of scarlet fever toxin to control of the disease in human beings, one should be certain that the toxin is derived from strains specific for scarlet fever, that it is highly potent and accurately standardized, and that it contains no animal serum or excessive amounts of other proteins. Slight changes in hydrogen ion concentration cause deterioration of the toxin. To avoid this, it is necessary to use non-soluble glassware, pure, neutral gum rubber, and chemicals of the highest purity.

Dilute solutions of the toxin are employed to determine susceptibility to scarlet fever. The toxin is first carefully standardized on human beings, for laboratory animals are so insusceptible as to be useless for this purpose.

The technic of the skin test for susceptibility to scarlet fever is exacting. Among the more common sources of errors are the following: inadequate syringes and needles; attempts to sterilize the syringes and needles with alcohol which precipitates the minute amount of toxin in the skin test solution; dilution of the toxin with water left in the syringe and needles after boiling; sterilization in alkaline tap water instead of distilled water; estimation of the amount of skin test solution injected by the size of the wheal produced instead of accurate measurement by graduations on the syringe; subcutaneous instead of intracutaneous injection, and failure to observe the reaction between twenty and thirty-four hours after the test is made. Slightly positive reactions are frequently interpreted as negative. This tendency may be due to familiarity with the Schick test which is usually interpreted as negative unless indurated. Scarlet fever toxin does not cause induration. When induration is present, it is usually the result of infection from the skin or contaminated material, or it may be due to an excessive amount of protein in the toxin solution.

There have been frequent instances of skin infections interpreted as positive tests and some of these have even been reported in the literature as indicating improper and irregular standardization of the skin test solution. It is impossible to add enough antiseptic to a solution destined for injection into human beings to prevent the growth of bacteria if the material is carelessly handled. Contamination is usually due to failure to clean the surface of the rubber stopper before puncturing it; to insertion into the vial of an unsterile needle, such as one which has just been used in making a skin test and is contaminated with skin organisms; or to keeping the vial of skin test solution until all the material has been used, puncturing the rubber stopper on successive days and forgetting that a puncture which closes sufficiently to prevent leakage does not necessarily close tightly enough to prevent growth of bacteria through the channel made by the needle. Infections resulting from contamination of the skin test solution usually do not suppurate, but they last longer than a true skin test. We have seen enough of them in various institutions to indicate that they are not uncommon and that to avoid them it is necessary

to discard at the end of the day every vial whose stopper has been punctured.

In making the skin test, the exact dose is injected intradermally on the flexor surface of the forearm at the junction of the upper and middle thirds. The reaction should be observed in a bright light, twenty to twenty-four hours after the test is made. Observations made later than twenty-four hours are not reliable. The slightest flush or reddening, no matter how faint the color, constitutes a positive reaction, if it measures as much as 10 mm. in any diameter. It is to be remembered that the test is one for susceptibility to scarlet fever and is not applicable to diagnosis of the disease.

Persons who are susceptible to scarlet fever may be immunized by means of subcutaneous injections of graduated doses of sterile scarlet fever toxin. The dosage should be correctly graduated, so as to give no harmful reactions, yet confer adequate immunity. The efficacy of this method of protecting against scarlet fever has been confirmed to varying degrees depending on the dosage employed by the different observers.

In our experience, active immunization with graduated doses of sterile scarlet fever toxin in 13,000 susceptible persons caused no injury in any instance. In three institutions, urine analyses were made before, during, and after immunization. There was no evidence of nephritis caused by the immunization. Some persons who had nephritis were immunized without causing an exacerbation of the condition.

In a large series, including highly susceptible persons, general reactions may be expected after each dose in about 10 per cent. But this 10 per cent is not composed of the same individuals after the different doses. The most highly susceptible persons usually react more strongly on the first doses; others may not have any reactions until the fourth or fifth dose is given. As a rule, reactions after the last and largest dose are fewer and milder than after the smaller first doses. The immunizing doses should be accurately graduated and it is important to give them in the proper sequence in order to avoid unnecessarily severe reactions. However, mistakes have been made in which the last dose has been injected as the first dose, and no fatalities have occurred. Experimentally, we have injected as much as 20 cc. of undiluted toxin containing nearly 1,000,000 skin test doses, without causing injury and without producing nephritis in human beings.

The doses of sterile toxin for active immunization should be graduated, beginning with 500 skin test doses in the first injection and increasing to 100,000 skin test doses in the last. The injections are made subcutaneously at intervals of one week. If the full amount is given in each dose, the five doses may be counted on to immunize completely 95 per cent of susceptible persons, and to modify considerably the susceptibility of the rest. Two weeks after the last dose is given, another skin test is made, using 0.1 cc. of the skin test solution or one skin test dose on the right arm, and 0.2 cc., or two skin test doses, on the left arm. If the reaction on either arm is positive, the fifth dose is repeated.

Unless the immunization is carried to the point of a negative skin reaction, complete protection against scarlet fever cannot be expected, although the severity of a subsequent attack would be modified by the partial immunization.

The duration of active immunity, as well as the degree of immunity, depends on the amount of toxin injected. Retests made at intervals of one, two, three, five, six, nine and ten years indicate that more than 90 per cent of those immunized to the point of an entirely negative skin reaction retain their immunity. Approximately 5 per cent may slip back and require a second immunization.

We are constantly encountering the suggestion that the five doses interfere with adoption of active immunization against scarlet fever and that a one-dose method would be desirable.

We have available charts of the amount of immunizing material actually used each year. These charts show that nothing has interfered with increasing use of immunization against scarlet fever. Employment of this cheaper, safer and more effective method of controlling scarlet fever both for the protection of the individual and for control of epidemics has steadily and rapidly increased and is still increasing. The curve continued to rise even during the depression. It naturally shows a seasonal variation, but the seasonal dips are less each year as the advisability of immunizing before an epidemic occurs becomes more generally appreciated.

It is probable that the fear of reactions and the necessity for using five doses have been beneficial influences as they tended to discourage both the public and the medical profession from employing the methods until they had fully informed themselves as to the results to be expected and the proper methods of administration.

There is no doubt that a "one-shot" method of immunization would greatly increase the use of preventive measures. But no such method is available and there is considerable doubt as to whether such a method would prove satisfactory. There is a fundamental fact of immunology which is overlooked by advocates of a "one-shot" method. It is well known that repeated, graduated doses of antigen administered at intervals of several days or longer result in a better immunity response and a higher antibody titre in the blood with less harm to the individual than the injection of a single large dose of the same antigen. We have had opportunity to verify this fact in connection with scarlet fever immunization on a number of occasions when retesting individuals who had accidentally or intentionally been given the fifth immunizing dose of 100,000 skin test doses of scarlet fever

toxin without the preliminary four doses. All of these persons had had severe reactions lasting one to two weeks accompanied by high fever, vomiting, and a generalized rash followed by desquamation without any permanent injury. Retests showed none of them completely immune, as the majority would have been had they received the five graduated doses.

Scarlet fever antitoxin is obtained from the blood of horses which have received gradually increasing doses of toxin over a period of several months. The serum is separated, aged, refined and concentrated. The incidence of serum reactions following the administration of scarlet fever antitoxin is slightly less than following the administration of other antitoxins, due probably to greater care in preparation.

The potency of scarlet fever antitoxin is determined by its capacity to neutralize the toxin. One neutralizing unit of scarlet fever antitoxin is the amount sufficient to neutralize one skin test dose of the toxin and hold it in combination at least forty-eight hours.

It is advisable to give scarlet fever antitoxin even in mild cases, because it is known that complications are apt to occur in mild as well as in more severe forms of the disease. If the attack is severe and the patient very toxic, two therapeutic doses of antitoxin should be given at once, and more after twelve hours if indicated. In puerperal scarlet fever, even more antitoxin is required.

Given early and in adequate dosage, scarlet fever antitoxin gives brilliant results. The patient sometimes recovers so rapidly that the attending physician may wonder if he could have been mistaken in the diagnosis. The longer the patient goes without antitoxin, the less he benefits from the antitoxin when it is given.

There is perhaps a tendency to be too complaisant regarding epidemics of *mild* scarlet fever.

While the frequency of complications is recognized, the lasting injuries resulting from them are not fully appreciated. That complications are not confined to the severe cases is shown by observations in a series of 743 cases of scarlet fever of only moderate severity treated without antitoxin. Otitis media occurred in 15 per cent, nephritis in 4.7 per cent, cervical or peritonsillar abscess in 3 per cent, and multiple arthritis in 12 per cent.

Since one of the most striking effects of early administration of antitoxin is reduction in the incidence of complications, it is evident that the mild as well as the toxic case should receive the benefit of antitoxin.

Control of scarlet fever by means of skin tests and active immunization is now a generally accepted procedure in institutions for the care of children, and among the nurses and doctors in contagious disease hospitals as well as student nurses and medical students in ordinary hospitals and medical schools.

We were recently requested by the American Public Health Association to prepare reports dealing with control of scarlet fever through skin tests and active immunization in public schools. We have ready reports on the results of active immunization based on skin tests in five different communities.

In compiling these statistics, we have accepted the local health department records without correction. The studies fall into two groups—communities studied less than five years and observations covering a period of more than ten years. The first group studied less than five years comprises 3,589 school children of whom 836 were immune. The incidence of conditions reported as *scarlet fever* has been 37/100ths of one per cent during the entire period up to four and one-half years. In the control group of 2,753 whose status of immunity was unknown or who were known to be susceptible and refused immunization, the incidence of scarlet fever for the same period has been 6.4 per cent.

In two communities results are available covering ten and twelve years.

In the fall of 1926 there was an epidemic of scarlet fever in North Chicago. This was particularly bad in the Holy Family Parochial School. At the request of the priest in charge and on the suggestion of the State Department of Health, control was undertaken in November, 1926. At the time there were 16 cases of scarlet fever in the Holy Family School.

Tests were made and observed on 122 persons of whom 66 or 54.1 per cent were susceptible and 56 or 45.9 per cent were immune to scarlet fever.

Nose and throat cultures taken at the time the first skin tests were made showed 34 persons infected with hemolytic streptococci and 90 persons not infected. Among the infected persons was a sister who in connection with her duties as a teacher was in constant contact with various children throughout the school day.

All infected persons were excluded from school for three weeks. No further cases of scarlet fever developed during this period.

After three weeks the quarantine was raised and the carriers were allowed to return to school. No cases of scarlet fever developed among those who had shown primary negative skin tests and none developed in the immunized group. Scarlet fever developed in a child who had shown a positive reaction but refused immunization. This child had shown a negative culture at the time quarantine was established and continued to come to school with the non-infected group. She remained well until the carriers returned to school when she developed scarlet fever. No other cases occurred at this time.

Testing and immunization were offered at intervals during the next nine years. This study comprises 3,725 school children of whom 2,130 were determined to be spontaneously immune or were

susceptible and immunized, while 1,595 children were not tested or were susceptible and not immunized.

During the ten-year period covered, the average *yearly incidence* of scarlet fever in the *control* group has been 1.9 per cent while in the *immune* group only one doubtful case was reported in the ten-year period, making an average yearly incidence of nine thousandths of one per cent.

The results at Mooseheart cover a period of twelve years. They are based on the study of 3,109 children. Before control measures were introduced in the spring of 1924, the yearly incidence of scarlet fever among these children was 1.2 per cent.

When the management of the school asked us to take charge of the scarlet fever, there were twenty acute or convalescent cases of the disease. This necessitated establishing a quarantine based on nose and throat cultures. The entire population including teachers and other employes were cultured and quarantine established, separating the infected from the non-infected individuals. Skin tests were made and prophylactic scarlet fever antitoxin administered to those who were both susceptible and infected. Active immunization with graduated doses of toxin was begun at once in all non-infected susceptibles and a week later in those susceptibles who had received prophylactic antitoxin. Another case of scarlet fever occurred in a susceptible boy living in a cottage where non-infected persons had been placed. Recultures made on the group revealed the fact that the proctor in charge of the cottage had evaded the first culture and that he was heavily infected with hemolytic streptococci and desquamating on the hands. Rearrangement of the inhabitants of this cottage based on the second cultures was made and no more scarlet fever developed in the group. But in another cottage a case of scarlet fever developed in a susceptible who had not been infected on the first cultures. Re-examination of the adult employes here showed that the man who had handled the milk in the kitchen had been missed on the first cultures. He was found to be an immune carrier and placed under quarantine. No further cases occurred. After the *fourth* immunizing dose of toxin had been injected in the susceptible children, the quarantine between the infected and non-infected group was abolished. No further cases of scarlet fever developed except among the families of adult employes for whom cultures were compulsory but some of whom had refused immunization which was optional for them.

By the time the quarantine was raised, most of the carriers showed negative cultures, but there were a number whose cultures remained positive over a period of at least two months and probably much longer, so that it was evident that newly admitted children were apt to be exposed to scarlet fever through contact with immune carriers. In fact, it is practically impossible to keep any group, school, or community free from the danger of scarlet fever resulting from the presence of at least temporary carriers of the scarlet fever streptococcus. This is the reason that permanent control through active immunization with the toxin affords the most effective means of combating epidemics. During the past twelve years the continued admissions of new children at Mooseheart furnished a control group. These children were tested and immunized if found susceptible within an interval of a few weeks to a few months after admission. But it sometimes happened that a new child developed scarlet fever before it had been immunized. Had the new children been left unprotected, the incidence of scarlet fever would naturally have been much higher among them. In interpreting the incidence of scarlet fever, it is necessary to keep in mind that these control children were unprotected for periods of only two weeks to six months and that they are now tested and immunized if susceptible on admission. This accounts for the low rate of scarlet fever in this control group in recent years, the cases of scarlet fever which have occurred lately being mostly in the children of teachers and resident employes for whom immunization is optional.

Of the 3,109 children studied, 1,277 were temporarily unprotected. There has been no *instance* of *scarlet fever* in a child who showed a spontaneously negative skin test or who was *susceptible* and *immunized*, in twelve years. When we began the control of scarlet fever at Mooseheart, the yearly incidence of scarlet fever was 1.2 per cent. Since then the yearly incidence of scarlet fever in the immune group has been zero and in the temporarily unprotected group it has averaged 1.1 per cent, varying from year to year according to the promptness with which immunization was done after entry.

Retests made at the end of nine years showed that both the spontaneously immune and the artificially immunized children were still immune.

Thus we have a total in these five communities of 10,423 school children showing no reduction in the incidence of scarlet fever in the control groups and complete or almost complete elimination of scarlet fever in the protected groups, attending the same schools.

In concluding, I wish to emphasize that in scarlet fever, as it occurs spontaneously as well as in the artificially produced immunity obtained by injecting toxin or in treatment by administration of antitoxin, there is a *quantitative* element which cannot be left out of consideration if the best results are to be obtained.

Will You Be in . . .

FRENCH LICK, OCTOBER 4, 5, 6

for the Annual Convention of the

INDIANA STATE MEDICAL ASSOCIATION?

POSTOPERATIVE CARE*

CHARLES B. PUESTOW, M.D.
Chicago

Constant improvement in surgical methods and technic and a better understanding of normal and pathologic physiology have tremendously broadened the scope of surgery. The great majority of operative procedures are carried out not as immediate life-saving measures, but to increase the comfort, health and happiness of the patients and possibly to lengthen their life expectancy. No elective operation is justifiable if it carries with it too great a mortality rate. Improvements in methods and selection of surgical procedures have reduced the danger of fatality to a very low figure in most fields. The safety of any surgical therapy should always be a primary consideration in the recommendation of it. In addition to bringing a patient safely through an operation, it is the surgeon's responsibility to do all within his power to minimize discomfort, avoid complications, and promote recovery as rapidly as possible. Diligent postoperative care will do much to accomplish this.

Equally as important as postoperative care, however, is the preoperative preparation of the patient. We know that many postoperative complications can be avoided by certain prophylactic measures, and by delaying surgery until the condition of the patient is sufficiently improved to better withstand the strain of an operation. A most important consideration is the nutritional state of the patient. Under-nourished individuals do not stand surgery well. There should be an adequate supply of glycogen present in the liver to help nourish the body during the period of hours or days after operation when the patient is unable to take nourishment by mouth. To provide this reserve, a high carbohydrate diet should be recommended for several days or longer before operation. If the disease to be treated interferes with the proper assimilation of food, from one to three liters of five or ten per cent glucose solution daily should be given intravenously one or more days before operation. Holman[1] stresses the importance of high vitamin content in the preoperative diet. He lays particular emphasis upon the importance of vitamin C because of the large supply of this vitamin in the adrenal body, which is so important in combating infection. His preoperative diet includes adequate amounts of citrus fruits and haliver oil. Dietary considerations are especially important in underprivileged patients who are most likely to be suffering from food deficiencies.

Equally important with the nutritional state of the body is its fluid balance. Fantus[2] states that preoperative preparation demands prevention of hypohydration and of salt starvation, and recommends that patients should not go to surgery who have not passed 1500 cc. of urine containing ½% chloride in twenty-four hours. Certain conditions such as gastro-intestinal obstructions, pathology interfering with gastro-intestinal function, inflammatory disease, and other conditions producing nausea and vomiting, all may lead to a fluid and possibly chloride deficiency in the body, and in such conditions the surgical risk is tremendously increased. To avoid this 1,000 cc. or more, depending upon the state of dehydration, of intravenous fluids should be administered before operation. A good index as to the amount of fluid which should be given is the urinary output.

The presence of anemia increases considerably the likelihood of postoperative complications. In a large series of operations, Hughson[3] reports a mortality seven times as great in patients whose hemoglobin was below 60% as in patients whose hemoglobin was above 80%. Where it is possible most surgeons believe in giving blood transfusions preoperatively to patients whose hemoglobin is below 60 or 70%.

Surgery is also avoided or delayed where possible in the presence of an infectious process. A mild coryza, bronchitis, or sore throat may be aggravated into a serious pulmonary complication by the administration of an anesthetic or by the physical strain attendant to an operation. Furthermore, wound infections occur far more frequently in the presence of respiratory disease, probably as a result of a blood borne infection, suggested by the frequency with which the same organisms found in the throat or sputum can be isolated from the infected wound.

To diminish apprehension and secure a good night's rest before operation, an adequate sedative, such as one of the barbiturates, should be administered to the patient on the night before operation, and repeated on the day of operation. A thorough cleansing enema on the night before or morning of operation is generally considered to minimize postoperative abdominal distress.

The purpose of most postoperative measures should be to prevent the development of complications, rather than to combat them after they have become established. A few years ago the use of blood transfusions, intravenous medication, and oxygen generally signified the terminal stages of some severe complication. Now these therapeutic aids are part of our routine armamentarium used in the avoidance of undesirable factors in the recovery of surgical patients. The importance of fluids has long been recognized in the maintenance of water balance, the elimination of toxic and waste products, and the control of body temperature. The oral administration of fluids is probably the most satisfactory method, where tolerated. We are all aware, however, of the

* Presented April 8, 1937, before the Tenth District Medical Society at Gary, Indiana.

[1] Holman, Emile: Preoperative and Postoperative Care. *Surgery*, 1:637-639 (April), 1937.

[2] Fantus, B.: Fluids Postoperatively, A Statistical Study. *J. A. M. A.*, 107:14-17 (July 4), 1936.

[3] Hughson, Walter: Preoperative Treatment. Dean Lewis—*Practice of Surgery*, Vol. 1, Chap. 12.

frequent occurrence of nausea and vomiting when oral administration is started soon after operation. Proctoclysis is a satisfactory method of fluid administration in some instances, but too frequently inadequate absorption occurs. A moderate amount of fluid can be given under the skin, but this method is often painful, only a limited amount of fluid can be given, and only low concentrations of glucose may be added. With the improvement in the preparation of solutions for intravenous infusion, and the eradication of the annoying reactions which were formerly so common, this has become the route of choice of many surgeons for the administration of fluids, and in many hospitals the intravenous injection of fluids is a routine postoperative procedure. Large quantities of solutions of varying composition have been poured into the veins of patients. In consequence, some unfortunate results have been reported.

The quantity and composition of liquids given by vein, and the methods of administration should be based upon logical considerations in each individual patient. Formerly a liter or more of normal saline solution or glucose solution was permitted to run into a patient's veins in a period of from a few minutes to one or two hours, the same procedure perhaps being repeated two or three times during a twenty-four hour period. Certain dangers attended this method of administration; namely, the possibility of reaction to the fluid, cardiac collapse because of rapid over-loading of the circulation, and, where glucose was administered, the loss of a large percentage of the glucose in the urine. These complications can be obviated by the slow administration of the "drip" method. To maintain an adequate water balance the fluid intake must equal the fluid output. Allowance for fluid loss by vaporization from the skin and lungs should be from 1,000 to 2,000 cc. in twenty-four hours.[4,5] The urine output should be from 1,000 to 1,500 cc. during this period. Additional fluid losses may occur by vomiting, duodenal suction and watery stools. Therefore, the fluid intake should range from 2,500 to 3,500 cc. in each twenty-four hours, plus an additional amount equal to any loss from the gastrointestinal tract. For the average postoperative patient, 3,000 cc. in each twenty-four hours is generally a sufficient and safe quantity. If the fluid is allowed to flow at the rate of about 40 drops per minute, the patient will receive approximately 3,000 cc. in twenty-four hours. At this rate, one does not need to be concerned about the temperature of the solution, and it may be administered at room temperature.

The composition of the fluid is important. We all realize the value of glucose in our normal physiology. It is the fuel of the body, and an adequate and constant supply is important to a patient's safe recovery. The liver is the only organ of the body which can supply glucose to the blood stream. Under most circumstances it possesses an adequate supply of glycogen to carry out this function. However, if because of preoperative starvation or temporary or permanent liver dysfunction it is unable to carry on this duty, serious developments may occur. We can fortify and aid the liver in this important function by the intravenous administration of glucose solutions. Three thousand cc. of a 10% solution in twenty-four hours can generally be tolerated well, with little or no loss in the urine, and will supply to the body 1,200 calories, which constitute a large percentage of the basal needs of most patients.

Glucose in 10% solution has the disadvantage of sometimes spilling over in the urine, and of producing considerable reaction and pain if the needle becomes dislodged from the vein and the solution runs into the subcutaneous tissues. For these reasons, many surgeons prefer a 5% solution. This gives a fair amount of glucose to the patient, does not overtax the kidneys, and produces little reaction if it gets into the subcutaneous tissues.

Normal salt solution, with or without glucose, has been used extensively, and was felt to be important to prevent salt starvation. This is especially true where there is considerable chloride loss from vomiting or duodenal suction. Recently Coller and his associates[5] have stressed the danger of excessive salt administration, particularly the frequency with which edema occurs. They recommend the use of 5% dextrose in distilled water. To my own patients, I generally administer 1,000 cc. of glucose in normal saline solution and 2,000 cc. of glucose in distilled water in the first twenty-four hours after operation. The fluid administration is continued until the patient is able to take adequate quantities of fluid by mouth to maintain fluid balance. Where kidney impairment exists, and the urinary output is low, there is danger in administering large quantities of fluid by vein in the hope of stimulating further kidney action. Careful records of fluid intake and fluid output on all postoperative patients should be the guide to logical fluid therapy.

The use of blood transfusions postoperatively should not be delayed until serious complications occur. When feasible, they should be given soon after operation to elderly and debilitated patients, and to patients who have had extensive surgery, such as gastric or large bowel resections, breast amputations, and major thoracic surgery. The early administration of blood can prevent postoperative shock, hasten a patient's recovery, and help avoid complications.

The pharyngeal or tent administration of oxygen is recognized for its prophylactic as well as therapeutic value after operation. Elderly or debilitated patients, or those upon whom extensive

[4] Cutter, R. K.: The Use of Large Volume Intravenous Injections. *J. A. M. A.*, **106**:1250-1252 (April 11), 1936.

[5] Coller, F. A.; Dick, V. S.; Maddock, W. G.: Maintenance of Normal Water Exchange with Intravenous Fluids. *J. A. M. A.*, **107**:1522-1527 (Nov. 7), 1936.

surgical procedures have been performed, will usually have less febrile reaction, a slower pulse, and a more rapid recovery if oxygen is administered to them for eighteen hours or longer after operation. At the first indication of any respiratory complication, the use of oxygen may prevent or minimize extension of the disease process, or may completely overcome it in a very short time.

Morphine has been said to be the most useful drug in the pharmacopeia. Judiciously used, it is a very valuable aid. Aside from the discomfort to the patient, pain definitely retards postoperative progress. Generally small doses of morphine, at intervals of three to four hours, are sufficient to keep a patient comfortable. If the first dose is administered before pain becomes severe, smaller amounts will be necessary to keep the patient relatively free of distress.

During the past year we have had an unusual opportunity to study the action of commonly used drugs upon intestinal motility, both of the large and small bowel. As a result of a series of operations and complications, a patient developed a large herniating cecostomy containing a number of loops of small intestine. Motility in both large and small bowel was easily visible, and the normal physiologic and pharmacologic reactions could be readily observed. As has been known to physiologists for many years, the opiates stimulate small bowel motility and increase its tonus. This same response of the small intestine was very definite in this patient. However, it was found that morphine and other opiates inhibited muscular activity of the colon. It was also noted that other drugs, such as eserin, acetylcholine and prostigmin had a stimulating action upon small bowel activity although to a lesser degree than morphine and likewise they inhibited the colon. Those drugs which increased colon activity, such as pituitrin and pitressin, had an inhibiting action upon the small bowel. In other words, there was a contrary response of the large and small bowel. If this is true of all humans, we may stimulate small bowel activity, where desired, by the use of the opiates, eserin or prostigmin, and we may stimulate colon activity by the use of pituitrin or pitressin. Obviously the morphine administered postoperatively to patients increases small bowel activity, thus emptying the contents into the cecum, but inhibits contraction of the colon. Colon distention may result and produce gas pains. These can be relieved by emptying the colon with enemas, and, if necessary, by the addition of drugs which will cause contraction of the large bowel.

Nausea and vomiting are generally very distressing to patients, and should be avoided if possible. Trauma to the intestine, often as a result of too light an anesthesia, predisposes these symptoms. Careful handling of the bowel during an operation, and good relaxation will minimize gastro-intestinal distress. The administration of fluids or food too soon after operation is often followed by these undesirable symptoms, which may be avoided by withholding all oral administration for twenty-four to thirty-six hours after most operations. If they occur in spite of this precaution, the use of a Levine tube or a Wangensteen suction apparatus to keep the stomach empty will add greatly to a patient's comfort, and will minimize the time during which food cannot be tolerated by mouth.

Other distressing symptoms, which many patients fear more than the actual operation, are distention and gas pains. These likewise may be encouraged by the early administration of food, and especially of carbohydrates. For this reason, it is well to administer non-fermentative liquids, such as water, tea and broth, during the first twenty-four hours of oral feeding, and withhold fruit juices and other carbohydrates until the third or fourth postoperative day. The intravenous use of glucose permits the restriction of carbohydrates by mouth for this period of time. These precautions, together with the use of enemas, forty-eight or more hours after operation, will help make a patient's postoperative course as painless as possible.

SUMMARY

In the preoperative preparation of patients, the nutritional state and water balance are important considerations. A high carbohydrate, high vitamin diet, with an adequate fluid intake and output, are desirable for several days before surgery.

In the postoperative care of the patients, an adequate fluid balance must be maintained. An accurate record of fluid intake and fluid output should be kept, and should serve as a guide to the quantity and type of intravenous fluid therapy.

Oxygen and blood transfusions are valuable prophylactic as well as therapeutic aids.

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ABSTRACT

HYPERINSULINISM ASSOCIATED WITH CALCIFIED TUMOR OF THE PANCREAS WITH SURGICAL CURE

S. F. HERRMANN and JOHN A. GIUS, Tacoma, Wash. (*Journal A. M. A.*, April 24, 1937), cite a case of hyperinsulinism of a marked degree associated with a pancreatic calculus without gross adenomatous islet tissue. The fact that clinical cure followed surgical removal seems to establish the etiologic relationship. It is possible, however, that tumor tissue of microscopic proportions was destroyed at operation. On the other hand, the mechanism of the production of hyperinsulinism on the basis of a seemingly inert foreign body in the head of the pancreas has not been adequately explained on a physiologic basis. This subject is to be investigated further. The tumor was a calcareous mass, which could not be sectioned. No pancreatic tissue was found by the pathologist. Soft tissue surrounding the stony mass consisted of fat, connective tissue and several small lymph nodes. There seems to be an analogy between adenomas of the pancreas and of the thyroid. Both become calcareous and both may be associated with hyperfunction.

INSULIN SHOCK TREATMENT OF SCHIZOPHRENIA*

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Within the last few months medical and lay literature has been flooded with a new dramatic treatment for dementia praecox. This treatment was introduced by Sakel of Vienna in 1935 and consists essentially of a prolonged series of hypoglycemic shock reactions produced by relatively large doses of insulin. Preliminary reports on a number of cases already thus treated in the United States have been so optimistic that we feel justified in presenting our experience with this form of therapy.

A series of typical institutional cases of dementia praecox were treated under the following technique. Patients were placed on regular measured diets with three calorically equal meals daily. Insulin was given twice daily, one-half hour before breakfast and before the noon meal. Twenty units insulin twice daily was used as a starting dose. This was increased 5 units daily until a complete hypoglycemic reaction dose was obtained. It was, however, found more convenient to deprive them of breakfast and to give them a single dose of insulin at 6:00 a. m. The same amount, 20 units, again was chosen as a start. Again 5 units were added daily until desired reactions supervened when the determined adequate maintenance dose was continued indefinitely. It was found that, without breakfast, from 35 to 60 units of insulin once daily were adequate in producing desired reactions.

Hypoglycemic shock is variable in its manifestations but some or all of the following symptoms are seen. With a blood sugar around 40 the patient becomes nervous and restless. Hunger is marked, and the administration of carbohydrates orally at this stage promptly terminates the reaction. However, if no food is given, the patient progresses into one of two typical reactions. The circulatory failure type of shock is characterized by a quiet peaceful progression into coma. The pupils are dilated. The skin becomes very pale, cold, and covered with perspiration. The muscular system is relaxed and there is marked atonia. The pulse is very slow and varies from 36 to 50 per minute. It is impossible to obtain a blood pressure reading at this stage. Respirations are either very shallow or almost insensible. Blood sugars are too low to read by the method of Folin-Wu. Intravenous administration of 50 per cent glucose almost magically terminates the reaction and a patient that at one moment was in the terminal stage of a circulatory shock will sit up and feed himself the next moment.

The other type of hypoglycemic reaction is more stormy and violent in its nature, and is characterized by epileptiform twitchings and convulsions. The onset is the same but the patient becomes more restless and disturbed as the blood sugar drops. There is evidently an increase in irritability of the entire nervous system. The stimulus threshold is reduced and even gentle attempts to control the patient produce great excitement, struggling, screaming, profanity, and resistance. Facial twitchings and grimaces with excessive slobbering of saliva are followed by tonic and clonic generalized convulsions. Occasionally transitory spasm of the respiratory muscles occurs. The throat fills with saliva and mucus, and respirations become gurgling in nature. The pulse may be slow or rapid but it is almost always irregular. It is impossible to administer glucose by mouth because of the tonic spasm of the swallowing muscles and the danger of strangulation. Intravenous glucose also produces a remission to the reaction but the post-convulsive period is again characterized by excessive excitement and irritability.

Either type of reaction may occur. Reactions are often mixed and features of both types may occur at once. The type of reaction is unpredictable and has no relationship to the dose of insulin.

In the management of these cases a constant surveillance was necessary on the parts of both the nursing and medical staffs. The treatment is heroic and fatalities have been reported. Especial care had to be taken to prevent self-injury during convulsions, stealing of food, and progression into too deep coma. Attacks could sometimes be terminated by nasal feeding of a concentrated sugar solution of fruit juices. More often it was necessary to resort to intravenous glucose. This was given slowly until the patient completely recovered from hypoglycemia. The transition point is distinct and is easily recognizable clinically. Upon recovery of consciousness, a cup of syrup was avidly consumed by mouth and this was followed by the noon meal.

A total of seven patients has been treated by this method at the Evansville State Hospital. We have chosen the following three cases as typical of our results.

CASE HISTORIES

Case 1: R. H., white male, age 24. Diagnosis: Catatonic dementia praecox. Father is neurotic. Childhood was characterized by good marks in school, and a shy, retiring personality. Onset of present trouble in 1927 was marked by an increasing sexual neurasthenia. He had been doing well in high school until his junior year when he became listless, uninterested, morose, and mentally clouded. He had always been shy of the female sex but at the time he became obsessed with delusions of sexual impotence. At one period he answered all advertisements pertaining to sexual rejuvenation. Masturbation became incessant and continuous. Gradually all contact with the outside world faded. The patient spoke less and less until his vocabulary consisted of a monosyllabic grunt in answer

* From the Evansville State Hospital.

to a question or command. General attitude became catatonic, and patient was practically unable to care for his own bodily needs.

January 3, 1937, this patient was started on 20 units of insulin twice daily. Dosage was gradually increased to 40 units twice daily at which dose complete hypoglycemic reactions occurred. Treatment was continued until March 12, 1937.

During the course of the treatment there seemed to be some improvement. This was especially noticeable in the period immediately following the transition from coma to consciousness. There was a better mental reception. Catatonic mannerisms were temporarily dropped. Questions were answered more fully. The patient performed simple tasks—tasks that he had not done for years—such as reading a paper, addressing a letter to his father, etc. However, these periods of mental clearness did not last long, and a brief period following the termination of active treatment finds him essentially the same mentally as he was before treatment was instituted.

Case 2: J. W., white female, age 35. Diagnosis: Hebephrenic dementia praecox. Family and past history is negative. Peculiarities had been noticed in her for some time, especially during pregnancies. She is the mother of four children. Definite onset of present trouble is given as October, 1935. She developed a marked antithesis against members of her family, especially her husband. She suffers from numerous delusions concerning religion and her family. At the beginning of her insulin treatment, she had many silly mannerisms. She persisted in sleeping under her bed, adorned herself with rag jewelry, refused to converse but was very noisy, and spent her time in bizarre actions. At times it was necessary to restrain her.

In the course of 35 days, the patient suffered 17 complete, severe and prolonged hypoglycemic shocks. Treatment made her quieter and more controllable. She conversed more intelligently, wrote good letters to her husband, and took better care of her personal appearance. For a while she did good work in occupational therapy. Then she relapsed and is at present a typical schizophrenic with numerous delusions, hallucinations, and abnormal reactions.

Case 3: B. N., white female, age 26. Diagnosis: Hebephrenic dementia praecox. Sister was a former patient in this institution. Past history is negative. Onset of mental aberration was noticed in January of 1935. She wandered around the streets and her conversation became irrational. She was disoriented, delusional, and hallucinated. She refused to acknowledge her husband, but claimed to be married to someone else and went out looking for him. She claimed she invented the radio and electrical refrigerators. At the beginning of her treatment she was unkempt, untidy, belligerent, antagonistic, coarse, and noisy. It had been necessary to keep her under constant sedation with drugs.

Patient was treated with a maintenance dose of 50 units of insulin twice daily for a period of 33 days. In her particular case complete coma was attained some twelve times, but a profound borderline hypoglycemia was maintained constantly.

Under treatment patient quieted down considerably. Conduct disorders became rare. Conversation became more rational. She took more care of her personal appearance. Bodily functions were taken care of normally. She is now working in occupational therapy all day. There is still a definite mental cloudiness with a lack of insight and judgment. The patient is still psychotic, but her adjustment is greatly improved.

Concerning the other four cases treated by this method, two showed the same transitory improvement during the course of the treatment with remission after treatment had been discontinued. One became decidedly more disturbed and disoriented; and in one, treatment had to be discontinued because of the development of an intercurrent acute tonsillitis.

SUMMARY

A series of seven typical dementia praecox patients were treated by the insulin hypoglycemic shock method of Sakel.

Five patients showed definite mental improvement during the course of the treatment, but in only one of these was the improvement retained after treatment had been discontinued. One patient became worse mentally; and for one, treatment had to be discontinued.

Our results tend to show that patients do appear mentally improved while undergoing this dangerous treatment, but the end results are disappointing.

ABSTRACT

EXPERIMENTAL STUDIES WITH SULFANILAMIDE AND WITH PRONTOSIL IN HEMOLYTIC STREPTOCOCCUS INFECTIONS

RALPH R. MELLON, PAUL GROSS and FRANK B. COOPER, Pittsburgh (*Journal A. M. A.*, May 29, 1937), report the results obtained by treating mice infected with hemolytic streptococci of different virulence levels with sulfanilamide and with prontosil. Two strains of hemolytic streptococci were used: the "Stoddard" strain, isolated from a case of septicemia at the Western Pennsylvania Hospital, and the "Pion" strain, which was obtained from the Pasteur Institute. The former had spontaneously acquired high virulence without animal passage and was used at the time of maximal virulence and also during a period of spontaneously diminishing virulence. The latter culture was considered moderately virulent. Both sulfanilamide and prontosil exhibit marked therapeutic effects in mice against hemolytic streptococcus infections. This effect obtains for strains of both medium and high virulence. Their experiments show no indication that phagocytosis is a factor in the mechanism of the therapeutic action of these drugs. Proper treatment of guinea-pigs with sulfanilamide results in a localization and rapid healing of experimental intradermal hemolytic streptococcus infections, which in the untreated animals may disseminate with fatal results. No qualitative changes in the character of the histologic response to the hemolytic streptococcus as a result of sulfanilamide administration have been noted.

SOME PROBLEMS OF SURGICAL DIAGNOSIS AND TREATMENT

INTERESTING CASE REPORTS

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STRICTURE OF COMMON BILE DUCT RELIEVED BY CHOLECYSTO-DUODENOSTOMY

C. T., male, aged 44, had been suffering for six years from cholecystitis and for four weeks from calculus impacted in the common duct with ensuing jaundice of eight weeks' duration. Nine days before admission, the pain suddenly ceased, a bullet-shaped (22 caliber "long") calculus appeared in the stool, and the jaundice began to disappear. A loud systolic murmur was heard at the apex and over the base of the heart.

At operation (Nov. 13, 1933) the great omentum was found adherent to the gallbladder; the latter was markedly thickened and of the strawberry type; the cystic duct lymph-node was enlarged, and the cystic, right hepatic and common bile ducts were dilated and thickened. There were no calculi in the gallbladder or common duct. An accessory bile duct was seen passing from the liver directly to the gallbladder through its fossa, and the right hepatic duct was anomalous in running parallel with and very close to the cystic duct. Examination of the removed gallbladder showed that the right hepatic duct had been inadvertently divided obliquely from before, downward and backward, just proximal to the cystic duct. Immediate reconstruction was affected by pedicle flaps from the cystic duct stump over a T-tube. Morison's pouch and the gallbladder fossa were drained and the wound was closed.

On the fourth day after operation, an enema produced a copious, tan-colored, soft stool with much flatus. The patient went home on the fourteenth day. The T-tube was removed on the forty-second day, and the sinus closed uneventfully.

In March, 1934, four months after the operation, itching began; then periodic attacks of chill and fever were followed by jaundice lasting two to three days. The urine would become very dark and the stools clay-colored. The diagnosis was made of obstructive jaundice due to stricture at the site of the operative union of the divided duct, and the patient was advised to submit to operation immediately. However, he postponed the latter for six months.

Second operation was performed on September 17, 1934. Adhesions were found between the omentum and the liver, duodenum, stomach and bile-duct. The latter was compressed at the upper border of the duodenum by adhesions and when dissected free was the size and shape of a small test-tube with its closed bottom forming the stricture. The duct was aspirated, removing a large quantity of white bile; it was then opened transversely just above the stricture and united to the duodenum by Sprengel's direct lateral hepaticoduodenostomy. Again drains were passed into Morison's pouch and close to the site of anastomosis. The postoperative course was uneventful, and the patient went home on the twelfth day after operation. By the end of a year after operation, the patient had regained the 50 pounds he had lost since the beginning of his illness, and now—two years after operation—is hearty and well.

John T. Bottomley[1] reports a very similar case, and his comments are germane to my own. "This case," he writes, "illustrates vividly the danger and consequences of operative injury to the main bile-ducts in procedures about the region of the gall-bladder, even in the hands of those accustomed to dealing with the difficulties and experienced in handling the problems of surgery in this field. These are the days of frequent cholecystectomy, and such a case is certainly worthy of note and comment, because it sounds a warning word and at the same time teaches a valuable lesson which touches on the matter of operative repair of the injury done . . . In the present instance, it may be said that never was an operation carried on in a drier field, or with a clearer view of the anatomic relations; the common and hepatic ducts were in plain view, as well as the cystic duct and the cystic artery. The operator either engaged, inadvertently, of course, a bit of the hepatic duct in the bite of the hemostat or, by undue traction on the hemostat, pulled up and so angulated the hepatic duct that in cutting aross the cystic duct he at the same time excised a bit of the main duct. Only after ligature of the cystic artery and removal of the gallbladder was the catastrophe revealed in the portion of the main duct attached to the specimen. Let me remark here that after a cholecystectomy, the specimen removed should *always* be examined carefully by the surgeon himself. In support of this contention, it may not be amiss for me to relate an incident which occurred in the practice of one of the most skillful and experienced surgeons in this country. He had completed a cholecystectomy and had closed the abdominal wound. He had even donned his street clothes and was about to leave the operating floor, when he bethought himself to examine the specimen. To his consternation, he found a portion of the main duct attached to it. A second operation was done, with a very happy result. If such a thing can happen to one of our great surgeons, how much more likely is it to occur in the work of the average surgeon!

"It is desirable that every attempt, successful or unsuccessful, to repair or to reconstruct the main bile-duct should be recorded. It is probable that many cases have never been reported because the original sin was the operator's and the attempt to relieve the result was unsuccessful. Surgeons

* Presented, in part, before the St. Joseph County Medical Society on October 27, 1936.

[1] *Surgical Clinics of North American*, August, 1922 (p. 901).

frequently learn more from failures than from successes, but our human nature makes us more prone to report the latter than the former for our neighbor's perusal."

Bevan regards these injuries of the common duct from cholecystectomies and the common duct plastics that are required for relief as almost the most difficult and serious operations that we do in surgery.

Anomalies of the bile ducts are to be anticipated in 25 per cent of the cases. They have been illustrated and described in detail by Eisendrath.[2]

In my own case, the second operation would probably not have been necessary had I let the T-tube remain *in situ* for one year instead of removing it on the forty-second day after operation. John Deaver and Starr Judd both insisted on prolonged drainage of the injured or diseased common duct.

ACUTE CHOLECYSTITIS: IMMEDIATE OPERATION VS. DELAY

A paper on "Prognosis in Gallbladder Surgery," by W. D. Wilson, of Rochester, Minnesota, et al., closes with the statement, "The desirability of early operation in acute cholecystitis is not proved when measured by mortality rates." The following case surely needed some yardstick other than mortality rates.

S. C., male, aged 46, was seen in consultation on March 13, 1935. On March 10th, early in the morning, he was suddenly taken ill with severe pain in right upper quadrant of the abdomen extending posteriorly and radiating to the right shoulder; this pain was followed by nausea and vomiting and slight rise in temperature.

Physical examination revealed tenderness in the gallbladder area extending down the right side and slight rigidity over this region. White blood cell count showed 14,900 whites with 86 per cent polymorphs; hemoglobin, 94 per cent; red blood cells 5,610,000. T. 99; P. 100; R. 22. Rose Bengal liver function test negative. Urine negative.

I advised immediate operation, in which the family physician and the patient concurred, but the latter stipulated that he was willing to be operated upon for appendicitis, but not for gallbladder disease. Accordingly, through a McBurney incision placed well out in the loin, the appendix was found retrocecal, kinked in the middle, distended proximal to kink, and obliterated distal to kink. It was removed. On opening the peritoneum, straw-colored serum was seen escaping through the wound. The exploring finger encountered a greatly enlarged and inflamed gallbladder as the source of the peritonitis. The McBurney incision was closed.

Employing the "unbolting" rectus incision,[3] the gallbladder was found to be the size and shape of a banana, blackish-green in color, tensely distended and spreading a severe acute streptococcic peritoneal reaction downward along the parietal peritoneum toward the right iliac fossa. The regional organs were adherent to the gallbladder. The removed gallbladder was found to be gangrenous with markedly thickened walls and atrophied mucosa; its contents were thick, mucoid light green bile and one mulberry calculus impacted at the orifice of the cystic duct. A rubber drainage tube and one cigarette drain were brought out through a small counter incision laterally placed.

Recovery was uneventful. Correlation of the history with the development of the disease is interesting. The patient's first attack occurred four years previous to admission, and the second, the year before admission, when he was treated for "gastric disturbance." Therefore, the gallbladder was chronically inflamed before the present attack. The latter was initiated by impaction of the stone in the cystic duct (sudden, severe pain) with the development of hydrops and distention sufficiently tense to obliterate the blood supply from the cystic artery and cause gangrene. The extension of the parietal peritonitis downward toward the right iliac fossa masked the gallbladder origin of the infection, though not the clinical history of cholecystic disease. In any event, the doubtful appendiceal involvement brought the patient around to immediate operation. Confronted by gangrene of the gallbladder with a "hot" acute diffusing peritonitis, the outcome with delayed operation would have been fatal. Since it is impossible to determine in a given case whether or not the gallbladder is undergoing necrosis (just as in acute appendicitis), is delay in acute cholecystitis warranted? There are, of course, two schools of thought here—those who advocate immediate operation and those who advocate delay—and to the latter belonged my late surgical chief, Dr. John B. Deaver. My own feeling is that in every doubtful case of acute cholecystitis (barring insuperable complications) at least exploration should be done to orient the nature and extent of the infection, removing the gallbladder if gangrenous, or, as in certain cases of acute perforative appendicitis, merely draining the peritoneal cavity, and removing the gallbladder later. By draining the peritoneal cavity I mean the insertion of drainage to the infected area (gallbladder), whether or not exudate is present. Aside from gangrenous cholecystitis, it is surely safer to drain the peritoneal cavity without disturbing the latter, than to open up fresh avenues of toxic absorption by removing the gallbladder, which is usually "red-hot" from acute infectious tissue hyperplasia, and with which the omentum and regional organs—aided by this "safety" drainage—are usually able successfully to cope (again excepting the presence of gangrene). In my experience, the removal of an acutely inflamed non-gangrenous gallbladder is, in the long run, too severe an ordeal to which to subject these patients.

[2] *Surg., Gynec. & Obstet.*, 1920, xxxi, 1-18.

[3] Skillern, P. G.: The "Unbolting" Incision for Approach to Upper Abdomen. *Surg. Survey of Washington Institute of Medicine.* Vol. 1, No. 4 (Nov.), 1936, p. 495.

EMPYEMA OF GALLBLADDER WITH SOLITARY STONE; CHOLECYSTOSTOMY

The following case illustrates adaptation of the more conservative cholecystostomy to the pathologic state of the gallbladder as revealed at operation.

Mrs. A. B., aged 48, housewife, had for some years been complaining of the gastric tympanites and pain in the right shoulder which are concomitants of chronic gallbladder disease. Early one Sunday morning she was seized with an acute attack of cholecystitis. Three days later an attack of Charcot's fever suddenly developed, with the temperature rapidly rising to 104 degrees, followed by chills and sweats and—the next morning —by clay-colored stools. The pain in the right shoulder became worse, and soreness developed in the right lower chest. Examination of the lungs, however, was negative. There was no complaint of gallstone colic, and no jaundice ensued. The fever, chills and sweats subsided within twenty-four hours, and the stools again became bile-stained: they were examined for stone, but none was found. Six days after this attack (on November 3, 1936) the fever having disappeared and the leukocyte count being low, operation was performed. Through an "unbolting" incision, the gallbladder was exposed and found to be reddened, tensely distended, and with its wall thickened by acute tissue hyperplasia except at the fundus, where there was a finger-tip area of thinness (softening). Regional structures were freshly adherent at the pelvis. After isolating the gallbladder with warm, moist compresses, it was aspirated through the softened fundus, yielding supernatant white pus (culture of which showed B. coli) and bile-stained mucus. An exploring finger passed through the enlarged fundus encountered a stone of the size of a large marble, occupying the cystic duct and held firmly in place by an hourglass constriction. The stone was removed and the gallbladder was drained in the usual manner, the rubber tube and a length of rubber dam from Morison's pouch emerging through a stab-wound just lateral to the linea semilunaris, at the lower costal margin. The patient had a smooth and uninterrupted convalescence.

In this case primary cholecystectomy was impossible on account of the position of the stone, and, after the stone was removed, was inadvisable on account of the still-lingering acute B. coli infection. Those who indiscriminately advise operation on all cases of acute cholecystitis usually fail to mention that the mortality of such operations probably exceeds 10 per cent, especially if the gallbladder is removed.

REGIONAL (TERMINAL) ILEITIS; ILEOCECOCOLIC RESECTION; ILEOCOLOSTOMY

The term "regional ileitis" was applied in 1932 by Crohn, Ginzburg and Oppenheimer to a benign, inflammatory lesion of the terminal ileum (usually, although other portions of the intestine may be involved), due to inflammation of the ileac mucosa with subsequent ulceration; the intestinal coats are edematous and thickened, as is the mesentery with lymph-nodes hyperplastic. This fibrostenotic process narrows the lumen, and there is a tendency toward perforation, the formation of a localized mass in the right lower quadrant (or elsewhere) and of a fistula into the adjoining intestine. Histologic examination reveals acute, subacute or chronic inflammatory reactions.

Clinically, the picture of regional ileitis is that of slow, progressive loss of weight, loss of appetite, anemia, rapid pulse, dull, constant pain in right lower quadrant, low grade intermittent fever, slight diarrhea or, if the narrowing has gone on to stenosis, constipation with distention, with perhaps nausea and vomiting, and a palpable mass in the right lower quadrant. The following case occurred in the author's practice four years before publication of the paper by Crohn[4] et al.

A. B., female, aged 34, housewife, was seen in May, 1928. The chief complaints were dull, constant pain in lower, right quadrant of abdomen of two weeks duration and, during the previous six years, loss of appetite and of weight (about 75 pounds), marked constipation, and gastric tympanites immediately after eating, followed by belching. She has not been nauseated, nor has she vomited. She had influenza in 1918. There is no history of carcinoma or of tuberculosis in the family.

Examination of blood revealed: Hemoglobin 95 per cent; red blood cells, 4,860,000; white blood cells, 11,850. Wassermann reaction negative. Urine negative. Physical examination revealed sustained rapid pulse beats, and tenderness and a rather indefinite fullness in lower right quadrant of abdomen.

Operation was performed on August 2, 1928, anociating the splanchnic nerves bilaterally with procain, and using ethylene inhalation anesthesia. Through a right rectus incision, the ileum and cecum were exposed. Palpation of the terminal eight inches of the ileum was like the feel of an age-hardened rubber hose which cannot be indented. The serosa of the ileum was deeply congested. The terminal foot of ileum, the cecum and the ascending colon were resected, followed by side-to-side ileocolostomy (transverse colon). The wound was closed, using sentinel drainage.

Examination of the excised segment of bowel revealed a stricture of the ileum close to the ileocecal junction, the stricture admitting a No. 18 French catheter. "Beginning at the ileocecal junction, six inches of the ileum are edematous and thickened; the tissue of the cecum is slightly thickened, but no gross tumor can be detected. Histologic examination of the tissue from the thickened portion of the ileum and from the cecum reveals a diffuse, chronic inflammatory process. There is no evidence of tuberculosis or of malignancy."

[4] *J. A. M. A.*, 99:1323-1328 (Oct. 15), 1932.

When seen on March 2, 1929 — seven months after operation—the patient stated that her weight had increased from 80 pounds previous to the operation to 111 pounds, and that her health was "wonderful" until one week before Christmas, when she had another attack of influenza. She has had pain in the lower right quadrant of the abdomen for the last four or five days. Under ethylene anesthesia, an abscess in the lower portion of the right rectus muscle was drained; culture revealed a streptococcus.

A case strikingly similar to my own is reported by Rosenblate, Goldsmith and Strauss[5] in a recent paper on this subject, who suggest the term "ileocolitis ulcerosa chronica" in cases in which the pathologic condition extends to the colon, just as Harris and his collaborators suggested the term "cicatrizing enteritis" because of the probable involvement of other portions of the intestinal tract. I lost track of my patient, but understand that she died a few years later from a progression of the disease, with the formation of an occasional abscess and of an occasional temporary fistula.

No definite etiologic factor has been established for regional ileitis, but my impression from my own case is that it represents an attenuated, probably streptococcic, infection of the bowel wall. My patient's illness was preceded by influenza, which is a streptotype infection, and months after operation a streptococcus was recovered from the rectus muscle abscess which appeared several months after an attack of influenza. The pathology reminds me very much of that found in the woody phlegmon of Reclus, which, likewise, is of supposedly attenuated streptococcal origin.

The pathology presented by my patient was a hard nut for me to crack. I thought of malignancy, actinomycosis and tuberculosis before, during, and even after operation (the recurring abscesses and fistulas). The condition is too rare for one man to see more than once or twice, so that when, in 1932, Crohn and his collaborators established the malady as a definite entity I was quite ready to get on their "band-wagon."

Microscopically the slides show non-specific inflammatory granulation tissue composed of granuloma, foreign body giant cells, and excess connective tissue. This granulomatous process of unknown etiology should be carefully sought for along the entire length of the intestinal tract.

A mesenteric abscess may result from perforation of a linear ulcer of the mucosa along the mesenteric border. Internal and external intestinal fistulas may often be found leading from the involved intestine to an adherent loop of bowel, or to the abdominal wall, as in my case.

Homans and Bass question the wisdom of excising a supposedly infectious lesion, such as regional ileitis. "Would it not be better," they ask, "to begin with a side-tracking operation, joining the ileum, proximal to the lesion, to the ascending colon?" Should this operation prove curative, no more will be required. Should it fail, or incompletely relieve, the diseased bowel can be removed at a second stage. Meyer and Rosi point out that spontaneous resolution often occurs in the acute stage of regional enteritis. Mixter[6] finds, however, that the disease tends to progress, and that where graded procedures have been employed, it has generally been found that the involved segment of the bowel has later developed some form of complication, either abscess or fistula, that has rendered resection much more difficult and hazardous. He has had no case in which a cure was accomplished short of this procedure. The mortality in his 11 cases was 36 per cent.

INCOMPLETE INTESTINAL OBSTRUCTION DUE TO LANE'S KINK

P. H., female, aged 25, single, stenographer, seen in February, 1932, stated that following an appendectomy elsewhere in 1929, she has been quite uncomfortable with frequent gastric upsets, loss of appetite, and the constant use of cathartics, which did not, however, entirely relieve her, nor keep her bowels regulated.

With the working diagnosis of postoperative (appendectomy) adhesions, operation was performed on March 2, 1932, using ethylene. Adhesions were found kinking the terminal ileum six inches from the ileocecal valve, causing incomplete obstruction. The deep attachment of this band (Lane's kink) was to the posterior peritoneum over the brim of the pelvis. There were also numerous pericecal adhesions and adhesions to the anterior abdominal wall at the site of the previous incision. The old cutaneous scar was excised, and the adhesions were dissevered.

The first enema—three days after operation—produced much flatus and a few small particles of feces. The second enema—two days later—resulted in a very good stool; and the third enema, at the same interval, gave good fecal results. After discharge from the hospital the bowels moved regularly, and the patient was wholly relieved of her symptoms.

INCOMPLETE INTESTINAL OBSTRUCTION DUE TO ILEUS DUPLEX

D. N., male, aged 35, bartender, was seen in September, 1935. He likewise had been operated upon elsewhere for acute appendicitis two years previously. Some months after operation an incisional hernia became evident and gradually enlarged until its ring became dilated to a diameter of two inches. The patient stated that during the past six or eight weeks his bowels had been moving with increasing difficulty, that eating was followed by gaseous distention which made him very uncomfortable, and that he was losing his appetite.

At operation on September 30, 1935, the old right rectus scar was excised, and the usual patience-taxing disseverance was made of the numerous adhesions within the hernial sac—namely, between the parietal peritoneal lining of the sac on the one

[5] *J. A. M. A.*, 106:1797-1800 (May 23), 1936.

[6] *Ann. Surg.*, 102:674, 1935.

hand, and the omentum and ileum on the other. When finally the terminal ileum was freed it was placed upon hot compresses and examined. About six inches proximal to the ileocecal valve the coils were bound into the form of a "W" by filmy sheets of adhesions, which flattened the involved coils to the breadth of a tapeworm. After dissevering these adhesions the bowel resumed its normal diameter. The omental sheet was drawn over the exposed bowel area, the hernia was repaired, and the wound was closed and drained. Aside from several nights made hideous by delirium tremens, which was finally controlled by S. frumenti, the patient made an uneventful recovery and has remained well since.

Knight and Slome have investigated the toxic factor in intestinal strangulation. They demonstrated the presence of a toxin (which caused marked depression of blood pressure and even death when injected intravenously into a normal animal) in the peritoneal fluid surrounding nonviable loops, in the venous blood of the loops of all types, viable and nonviable, in the thoracic duct during absorption, and in the urine. It is a new product formed within the wall of the gut as a direct result of strangulation.

COMPLETE INTESTINAL OBSTRUCTION DUE TO CARCINOMA OF SIGMOID

E. L., male, aged 51, auditor, was seen in consultation on October 25, 1935. On October 9 acute pain developed in abdomen and became generalized, with exacerbations on right side. There was nausea, but no vomiting. During the next two days the condition gradually became worse, the pain remaining generalized, but with some relief from its acuteness. The abdomen gradually became uniformly distended. There had been no stool whatever during the intervening sixteen days. On examining the abdomen I was struck by the enormous, barrel-like distention, with diffuse tenderness and edema of the abdominal wall. Strangely enough, the patient had not vomited. Rectal examination was negative. A flat x-ray plate revealed enormous distention of the intestinal coils with gas throughout the abdomen. Blood examination showed: Hemoglobin, 84 per cent; red blood cells, 4,710,000; white blood cells, 16,000. Urinalysis showed: Specific gravity, 1023; albumen, 1+; granular casts, 3+; hyaline casts, 1+. It was stated that shortly after the patient was taken sick sugar was found in his urine, and that for this reason exploratory operation was decided against. Moist rales were found at the base of the left lung.

The diagnosis was evidently complete intestinal obstruction of over two weeks' duration. Owing to the great distention of the abdomen the cause could not be determined. The patient stated that he had pain in the stomach and abdomen two years previously.

I decided to perform the too long delayed enterostomy. Owing to the enormous distention and the danger of uncontrollable evisceration it was deemed best to perform laparotomy in the right iliocostal space—more specifically, the old and rarely used lumbar colostomy. This was done on October 28, using local anesthesia. The cecum was found enormously distended, and on opening it there escaped about 1,500 c.c. of semi-solid, mushy, fecal material, part of which was aspirated. The cecostomy and wound were left open, on account of the patient's precarious condition.

The patient died about eighteen hours after the operation. Necropsy revealed in the splenic flexure a tumor which entirely surrounded the bowel. There were no metastases. The appendix was normal. The intestines were covered by thick, purulent exudate. All the intestines were markedly enlarged and thickened. The anatomic diagnosis was (1) obstructing carcinoma of the splenic flexure; (2) ileus; and (3) general peritonitis.

JACKSONIAN EPILEPSY; CRANIOTOMY; RECOVERY

F. S., a male, aged 20, was seen on March 28, 1929. He had to quit work as a telegraph boy because of attacks of convulsions, which, according to his mother, occur both as small and as large attacks. The smaller attacks began about one year ago; in each attack the patient would suddenly become rather rigid and apparently stare vacantly; he would not lose consciousness or fall, but the left side seemed to be involved. These attacks were very short in duration and occurred about once a week at first, but during the last month they have occurred about three or four times a day.

The large—or major—attacks began in January, 1928. During these attacks the patient was unconscious and the entire body was involved. These attacks began as small ones, the head turning to the left and the left side growing rigid. The patient would then fall over—the whole body growing rigid—and then develop a generalized tremor. The mouth usually opened and the patient turned a ghastly, pale greenish color. After the attack the patient would be completely exhausted and would fall asleep; after two hours of deep sleep he would awaken, very much refreshed. There has been no change in mentality or disposition. Recently the patient has had as many as four attacks a day.

Physical examination revealed malnutrition and poor development, pallor, defective enamel in many teeth, and scoliosis producing asymmetry of the chest, the left costal margin being very close to the iliac crest. Palpation of the skull was negative. Despite the pallor the hemoglobin was 115 per cent; leukocyte count, 11,900. Urinalysis was negative.

The hazards of the frequent attacks demanded unremitting attention on the part of the parents and confined them to the home. They requested that an exploratory operation be performed, though it offered only the remotest chance of success.

At operation an osteoplastic flap was reflected so as to expose the right Rolandic area. A square of dura measuring 5 by 5 cm. was uncovered and examined for scar or cyst, but none was found. The skull itself was, however, much thicker than normal. The osteoplastic flap was replaced and the scalp wound was closed, leaving room for emergence of a cigarette drain placed beneath the flap.

After the patient's discharge from the hospital there were no more epileptic attacks, nor has there been any during the intervening seven years. As a messenger boy the patient rides his bicycle all day long, and the parents have been relieved of all worry on his account.

Although no history of recent head injury could be elicited in this case, it is quite likely that such an injury occurred earlier in life and was forgotten, the convulsions beginning years later. In these cases the pathology most often present is a dural scar or dural thickening from organized blood clot, a dural cyst, or a depressed fracture of the skull. While the percentage of these cases relieved by operation is very small, and therefore this is a disheartening state of affairs, still at the same time you must remember that every one you rescue by an operation goes to your credit account, and that you have exposed the patient to practically no operative risk, because the operations are not fraught with danger.

CYST OF BRAIN (OCCIPITAL LOBE); CRANIOTOMY

N. T., male, aged 5½ years, was seen in January, 1929, at which time he was afflicted with total blindness, left hemiplegia, and epileptic attacks. Three years previously he had an attack of meningoencephalitis of sudden onset following a sore throat. After an illness of three weeks the patient recovered consciousness and talked to his father, but he was blind and the left arm was paralyzed. Several days after the encephalitis started osteomyelitis of the skull developed in the occipital region, suppurated, discharged, and healed in about one month.

Several months after the illness, epileptiform attacks began, at first mild, merely consisting of twitching and grimaces with an occasional fall; of late they have been accompanied by a cry and a fall and are quite severe, lasting from fifteen to twenty minutes. The weakness of the left arm has not improved. The left leg was strong until recently; the patient can walk on it if he is steadied, slightly dragging it after him, however.

Physical examination revealed a well-nourished boy who was extremely excited and uncontrollable, acting like a wild animal, even making facial grimaces like an ape. The eyes can perceive light, but no objects. The pupils react sluggishly to light. The patellar reflexes are exaggerated. There is spastic paralysis of the left arm. The urine and blood are normal. Bulging at occipital defect.

The diagnosis was made of meningeal cyst at the posterior pole (occipital lobe) of the brain.

Operation (January 29, 1929).—The scalp was found adherent to the area of depressed bone. Craniotomy was performed by the osteoplastic boneflap method. On opening the dura and arachnoid, cerebrospinal fluid escaped from the enlarged subarachnoid space. On opening the pia a cyst was found extending from the posterior pole forward into the occipital lobe for about 7 cm., the overlying cerebral cortex being greatly thinned. The cyst wall was marsupialized and the osteoplastic flap was replaced, a foramen of the dura being left for drainage. The scalp was closed.

After operation there was, of course, no restoration of sight. The convulsions continued, but were not so frequent, nor so severe. The left arm became somewhat more useful. The greatest change was in the boy's mentality: he became quite docile and affectionate, and now, seven years after the operation, his father tells me that he is so glad the boy was operated upon, for after that he began satisfactorily to occupy the son's place in the father's heart.

In the *Clinical Journal of London* (June, 1917), the author presented a paper entitled "A Clinical Study of Two Traumatic Lesions of the Central Nervous System," describing in detail the operative technic as practiced by the neurologic surgeons of that period. Since then this work has been greatly facilitated by the introduction of the endotherm and other electrosurgical units, and the operability has been extended until now the successful removal of a cerebral hemisphere has become almost commonplace.

BLOCKING OF CRANIAL AND PERIPHERAL NERVES

An edentulous individual came into my office complaining bitterly of pain in his tongue. Examination revealed a trophic ulcer on the right side of the tongue and severe pain along the course of the right lingual nerve. The lingual nerve was blocked with two per cent procain, and the ulcer was sparked with the endotherm. At his next visit—two weeks later—the ulcer was healed, but the nerve was still painful. It was now blocked with fifty per cent ethyl alcohol with satisfactory relief. A curious sequel of the blocking was the almost immediate and very rapid tumefaction of the right sublingual salivary gland.

Some months later the patient came in with his face distorted by grimaces. He was obviously suffering from tic douloureaux in the distribution of the mandibular nerve. Using a solution of alcohol of the same strength the nerve was blocked at the foramen ovale by the extra-oral subzygomatic approach, again with relief. About one year later the patient came in with involvement of the maxillary nerve, which was similarly blocked at the foramen rotundum. I have not seen him for several years.

At the present time there is heated discussion on the question of alcohol block vs. sensory root resection in tic douloureaux. Dandy, of Baltimore, dislikes alcohol block and prefers the Spiller-Frazier operation, with its greatly improved safety. Grant, of Philadelphia, on the other hand, finds that early sufferers from tic douloureaux shy away from an immediate operation and demand nonoperative relief. "Furthermore," he writes, "the patients become accustomed to the anesthetic area on the face and when they return for operation are completely satisfied to learn that a subtotal avulsion of the sensory root will not markedly increase this anesthesia while permanently relieving the pain."

In office work I find infraorbital and mental nerve block very useful in anesthetizing the parts of the face to which they are distributed for operative work in those areas.

BLOCKING OF THE BRACHIAL PLEXUS FOR CHRONIC PAIN

A physician was stricken with right cerebral embolism. Soon excrutiating pain developed in the paralyzed left upper extremity. Responding to his call I blocked the brachial plexus with diluted alcohol, using the supraclavicular route suggested by Kulenkampff. Immediate relief ensued and lasted two years. He is now complaining again, so I will repeat the treatment. I have also found procain block of the plexus very satisfactory for operations on the upper extremity—especially amputations. At the elbow procain blocking of the ulnar nerve, and at the wrist, of the median nerve are likewise very useful. A medical friend recently referred his son—a medical student—who had contracted a streptococcic infection of the pulp space of the thumb. Median nerve procain block at the wrist not only relieved the pain immediately, but also permitted painless horseshoe-incision from the tip into the space, and kept the pain away for an hour or two afterwards, by which time, of course, it was of much less severity.

NEUROFIBROMA OF ULNAR NERVE; EXCISION; END-TO-END UNION

L. R., female, aged 63 years, came in with a painful swelling in the lower third of the right upper arm, of about one year's duration. It was apparently connected with the ulnar nerve, for it could be moved from side to side, but not in the opposite directions. It was very tender on pressure. Owing to the patient's age—and therefore doubtful malignancy—immediate removal of the tumor by operation was advised.

Operation was performed under brachial plexus block by two per cent procain. The tumor was exposed by an incision over the course of the ulnar nerve in the lower third of the upper arm: a tumor of the size and shape of a small onion was found forming a spindle-shaped dilatation of the nerve. The tumor-bearing length of the nerve was resected, and the distal portion of the nerve was shifted to a tunnel in front of the internal epicondyle of the humerus in order to lengthen the now shortened nerve, and end-to-end suture was performed. The wound was closed without drainage.

Microscopic examination of the specimen revealed neurofibroma.

Of course, after operation the typical *main-en-griffe* of ulnar paralysis developed. However, about nine months after operation, return of function was first noticed and now—eight years after the operation—is complete.

In nerve suturing, to reduce the production of scar tissue to a minimum and thus obtain the best results, absolute approximation and almost exact equality of size of the cut ends of the nerve (or graft) are essential, as was recently emphasized by Dr. Beattie, the conservator of the museum and director of research of the Royal College of Surgeons in his annual report of important researches carried out during the year.

PARALYSIS OF MEDIAN NERVE AT ELBOW FOLLOWING FRACTURE; RELEASE WITH SHIFTING TO A NEW BED; ULTIMATE CURE

A ten-year-old boy at an exciting moment fell from his seat at the circus some twelve feet to the ground, suffering a compound fracture of the left humerus close to the elbow. He was treated elsewhere for the fracture, which ultimately united in fair position, but left as a sequel loss of function of the median nerve in its distribution to the hand, as evidenced by wasting of the thenar eminence and trophic disturbances of the nails of the thumb, index and middle fingers, with loss of sensation in same. It was for this median nerve paralysis that the boy was brought to me. Examination revealed, in addition to the above, scar-tissue compression of the nerve just above the elbow. The nerve was exposed, dissected from the scar tissue, and shifted under an adjacent muscle for protection. Improvement was noticed very soon after this operation—much sooner, of course, than after the complete division of the ulnar nerve in the previous case—and now twenty-two months afterward, complete restoration of function has been effected.

An interesting side-light in this case is that two months ago I had to treat the boy for a Colles' fracture on the opposite (right) side, and it was surprising how much the left hand improved while the right was bound up.

HYPERTROPHIC VILLOUS SYNOVITIS OF THE KNEE-JOINT OF 32 YEARS' DURATION; ARTHROTOMY; EXCISION OF VILLI; RECOVERY

Mrs. S. S., age 66, housewife, of Columbus, Indiana, came in to my office in the fall of 1935 stating that for the past 32 years she has had pain in the left knee and difficulty in walking with occasional locking in flexion. The knee-joint swells if used very much. During the past two years the pain has been getting worse—so much worse as to cause almost nightly insomnia. During this time she has undergone treatment in various places for a "rheumatic" knee. The patient's tonsils were removed at an early age.

Examination of the left knee revealed slight swelling and tenderness along the antero-mesial margin of the joint.

The provisional diagnosis was made of an internal derangement of the knee-joint for which exploratory arthrotomy was indicated. The two lesions suspected were (1) hypertrophied synovial villi; (2) deranged medial meniscus.

At operation, which was done through a Jones exploratory incision, there were found hypertrophied synovial villi playing between the medial meniscus and the tibia below, and the femur above on extension. That is, with the opened knee-joint before us, we grasped the flexed leg and extended it, and just as the limit of extension was reached we could see the hypertrophied villi drop in between the bone ends and be pinched by them: this was the mechanism of her pain.

The villi were ablated. The menisci were normal. An osteophyte on the anterior portion of the inner femoral condyle was removed. The wound was closed without drainage and a posterior splint was applied.

After operation the old pain did not return again. The splint was removed at the end of the third week, the patient took her first steps a week later. Thereafter her walking remained painless, her insomnia disappeared, and after acquiring a new set of teeth and new eyeglasses she felt herself on top of the world again.

The hypertrophic villous synovitis results from irritation of the synovial membrane, causing effusion with edema and swelling of that membrane, which, by being pressed between the ends of the joint, was pinched and traumatized. The possibility of repairing this knee-joint by any other method than that of excision of the synovial layer of the capsule is out of the question.

This synovial thickening is apt to be greater in stout women as they climb the fifties. In the rheumatoid joint conditions, also, thickening of this type occurs. The type of infection at work in this patient's knee-joint has not been determined. Many sufferers from hypertrophic villous synovitis exhibit a decided tendency to bleed, and profusely. Volkmann, in *Deutsche Chirurgie*, referred to the frequency with which these joint-changes occur in patients with a hemorrhagic tendency.

COLLOID GOITRE WITH ANGINOID ATTACKS; TOTAL THYROIDECTOMY

Mrs. M. D., housewife, aged 47 has been bedfast since receiving an infected wound of the leg 2½ years ago. Following that she developed attacks of extreme cutting pain over the precordium and extending down the left arm. There were, in addition, frequent attacks of tachycardia. In the past eighteen months the patient's weight has dropped from 185 pounds to 100 pounds, and she has become increasingly nervous.

Physical examination reveals a woman of slender physique. The thyroid gland does not appear to be enlarged, and the basal metabolism test is negative. The heart is enlarged to the left, and the heart sounds are transmitted over almost the entire anterior chest. The pulse is rapid and arrhythmic.

The anginoid attacks became so intolerable that the patient begged for permanent relief. After explaining the procedure to her it was decided to ablate the thyroid gland.

At operation on July 1, 1926, complete bilateral lobectomy including the isthmus of the thyroid was done. The pathologic diagnosis was "colloid goiter with focal hyperplasia."

During the four months now elapsed since the operation the patient has been much more comfortable. The severe anginoid attacks have disappeared, the pulse has settled down almost to normalcy, and the patient is no longer bedfast. Her appetite is good and she has gained weight. There is as yet no sign of hypothyroidism.

1001 TOWER BLDG.

ABSTRACTS

USE OF SULFANILAMIDE IN GONOCOCCIC INFECTIONS: PRELIMINARY REPORT

Because of the close biologic relationship between the meningococcus and the gonococcus, JOHN E. DEES and J. A. C. COLSTON, Baltimore (*Journal A. M. A.*, May 29, 1937), investigated the effect of oral administration of sulfanilamide in nineteen cases of gonococcic infection seen in the Brady Urological Dispensary of the Johns Hopkins Hospital. With a few exceptions, all patients received, in four divided doses a day, 4.8 Gm. of sulfanilamide daily for two days, 3.6 Gm. daily for three days, and then 2.4 Gm. daily for from four to eight days. The active urethral discharge disappeared in three cases in one day, in seven cases in two days, in two cases in three days, and in two cases in seven days. In one case it disappeared in four days to recur slightly on the fourteenth day and again disappeared on the sixteenth day. One patient was treated for two days with sulfanilamide but failed to return until three days later. The discharge had continued during this time. The drug was again administered for two days but the patient did not return until the twentieth day, at which time the discharge was still present and positive for gonococci. The drug was again administered and the discharge disappeared and the smear became negative for gonococci in the ensuing three days and has not recurred to date. In two cases, the discharge is still present ten and twelve days respectively after the beginning of treatment. One patient, with chronic anterior and posterior urethritis, subacute prostatitis, subacute right epididymitis and acute left epididymitis had no urethral discharge, but gonococci were demonstrated on smear and culture from the urine. The organisms disappeared three days after the institution of treatment, and there had been marked diminution in the swelling of the left epididymis. When seen last on the fourteenth day after the institution of the treatment, the patient was free from symptoms, there was no urethral discharge and the urine was clear in three glasses. Prostatic secretion showed from 6 to 8 white cells per high power field. Stained smears from the urethral discharge and centrifugated urine became negative for gonococci in from two to twenty-three days. In one case smears became negative on the ninth day, positive on the fourteenth day and again negative on the seventeenth day. In three cases gonococci are still present after eleven days. Symptoms of burning and frequency disappeared in from one to eight days. Symptoms of slight dizziness and lassitude occurred in four cases with the initial larger doses, but disappeared when the amount of the drug was reduced. In several instances it was noted that, as the urethral discharge began to disappear, the gonococci were found to lie extracellularly, with little or no evidence of phagocytosis by the leukocytes. Immediately on the complaint by the patient of lassitude or dizziness, the dosage must be reduced or the drug discontinued completely. We have observed no serious symptoms. Should symptoms persist, a complete blood study should be done. Their use of sulfanilamide in the treatment of gonococcic infections has led the authors to believe that this drug will prove of great value when large numbers of gonococcic infections can be closely followed, so that an accurate evalution of sulfanilamide in the treatment of gonococcic infections can be determined and the optimal dosage and possible deleterious effects further studied.

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JULY, 1937

EDITORIALS

DOORSTEP BABY

For five days and far into four rather hectic nights during the eighty-eighth annual session of the American Medical Association at Atlantic City, the powers at Washington, D. C., and the high-ups of the A. M. A. played a game as old and sometimes as mysterious as history itself. In the army the game is called passing the buck. While the Greeks probably had a name for it, modern parlance labels the pastime "leaving the baby on the doorstep," and any unwanted problem becomes, indeed, a doorstep baby.

This particular baby's story has been told and retold countless times by the newspapers and newsmagazines. It must be remembered, however, that headlines are apt to be misleading, and such statements as "Doctors Consider State Medicine" are inaccurate, for the question of state medicine such as is practiced in Russia, Germany, or England (and which usually is thought of when the subject is mentioned) never was presented to the House of Delegates. What was presented, however, was a state medicine baby with propositions, resolutions, and suggestions which a majority of the delegates felt would give the infant unwarranted rapid growth.

On Monday morning, June seventh, the opening day of the session, as the doctors from all over America breakfasted in the hotels and cafes along the Board Walk, they were faced by the headlines of New York and Philadelphia newspapers announcing that the delegates from New York State were going to present a resolution which had been adopted by the New York State Society and which had been discussed in a conference at the White House attended by certain physicians, none of whom could be classed as an official representative of the American Medical Association. This was far from an auspicious beginning, and the situation was not improved when Dr. Samuel Kopetzky of the Empire State delegation read the resolution in *open* rather than executive session. It filtered through to the delegates that New York State was asking that the federal government pay with federal funds for the care of all the indigent, the support of medical institutions and for medical research. Immediately the horrors of the disputes and disturbances of the old FERA came into many minds. It didn't take long for even those least versed in the ways of the House to foresee that even though the New Yorkers had the powerful places in the House set-up (the speaker and the chairmanship of reference committees to which the resolution might be referred), the resolution was doomed to die. Any real chance it had of being salvaged even in part disappeared early in the session because of the manner of presentation. In the first place, members of the House felt that some hidden or sinister force motivated the entire matter. The thought arose that the profession of New York City did not have a satisfactory set-up in regard to medical services because of the endowed institutions and clinics, and were asking the House of Delegates of the A. M. A. to pull their metropolitan chestnuts out of the fire. This fire, they said, had been kindled through overcharging for medical services by some New York City physicians which made reception of medical care for the average man prohibitive in some quarters while university and heavily endowed institutions had made a deep encroachment on private practice. If shortcomings existed in the present system, they were largely in New York. In most of the Middlewest communities, medical services were available to the great mass of American citizens at prices they could reasonably afford to pay.

For two long days the baby was passed around. The reference committee on executive session to which it was referred, placed it on the doorstep of the Board of Trustees; the Board handed it to the House, and the House passed it back to the reference committee on executive session. There the baby was bathed, dressed in its Sunday best, and sent to Washington, with the following farewell: "The A. M. A. reaffirms its willingness, on receipt of direct request, to cooperate with any governmental or other qualified agency, and to make available the information, observations and results of investigation together with any facilities of the Association."

But the baby was no sooner deposited in Washington than Senator James Hamilton Lewis appeared in Atlantic City carrying a mysterious something which he verbally and with great ceremony unwrapped, and behold! there was the baby right back on the A .M. A. doorstep once more,

this time, according to Senator Lewis, with the blessing of President Roosevelt, a thing which the President later denied. To this day it isn't definitely known whether or not the baby delivered by Senator J. Hamilton Lewis was the original New York youngster, an identical twin, or only the brainchild of the Senator himself.

The House of Delegates took the child in and placed it with the Board of Trustees once more. Whether the baby will remain there, to be nourished and brought up by the physicians themselves, or whether it will be left on the doorstep of some group of social and welfare workers who are just itching to get their hands on it, or fall into the hands of some smart political group where it will flourish outwardly for a period only to be strangled to death by bureaucratic red tape, is at present the burning question. The answer will come after many long conferences, numerous trips to Washington, and perhaps a round table at the White House.

To drop the metaphor, the membership of the Indiana State Medical Association is confident that the Board of Trustees in whatever course it recommends will maintain the high tradition of American medicine and will not take any action which will lead to the socialization of medicine. It will devise ways and means to render a high standard of medical service in any sector of the country which can be found actually to exist where citizens are not receiving efficient medical services, and without penalizing other sections where satisfactory medical services now are rendered.

And remember that, as an integral part of the A. M. A., the final disposition of this doorstep baby is partly your responsibility!

DEMON RUM

Liquor stores, calling themselves "home" and "family" stores, to emphasize their value to the welfare of the family, are becoming thicker than gasoline stations.

Ethyl alcohol is the most important poison in the text-book of toxicology. Its best known habitat is whisky, gin, rum, and brandy, the hard liquors which are responsible for more deaths in this country than any other poison. Directly hard liquors may be drunk, by intent or by smart-aleck dare, in sufficient quantities to cause death. A concentration in the blood of 0.6 per cent will be fatal. A pint to a quart of 100 proof whisky, if taken all at once, may result in death; a pint and a half usually will be fatal. Indirectly it kills by causing its victim to fall from a high window, to choke himself by inspirated vomitus, to contract a fatal pneumonia while lying in a gutter on a wintry night, to drive his car and himself to destruction, to shoot himself while despondent or maniacal, or to starve himself in delirium tremens. If these were the only results, it might be good for the race through riddance of undesirables, but to the toll must be added the deaths of those bystanders, those killed by alcohol's victim while in a fit of anger, mania, or melancholia.

The treatment of delirium tremens is the leading article in a recent issue of *The Journal of the American Medical Association*.[1] It reports 300 consecutive cases and points out the potential high mortality in such cases. A 37 per cent mortality was reported by one clinic, and the mean mortality in the last ten years was given as 10 to 12 per cent. In the series reported, with careful management the mortality was 5.3 per cent. Delirium tremens occurs usually after three or more years of chronic alcoholism and in persons over thirty years of age. Probably we will be hearing more of this condition soon.

There was a period when liquors were spoken of as important medicinal agents, and many physicians resented their inability to prescribe them. An examination of prescriptions of prohibition days readily shows what a farce this privilege was. The amount of medicinal liquor consumed in a large modern hospital is very small. One therapeutist noted in his review of Cecil's Textbook of Medicine with 150 contributing authors, covering 500 diseases, that alcoholic beverages were mentioned only six times as treatment, and then with reservations. The same beverages are mentioned sixty times as causing disease *and fifteen times as specifically prohibited in treating* certain diseases.

Why do people drink the stuff to excess? Some drink too much because they have no other interests, and alcohol creates a more interesting world than reality for them; when something of importance comes along, liquor is forgotten. If they do not have vital organs especially susceptible to alcohol, and chronic alcoholism has not developed, these persons will not be much or any affected. Certain people can drink large quantities of liquor with no apparent bad effects. In some cases, drinking is an expression of a psychosis, an effort to avoid the problems of life or to cover a period of depression and feelings of inadequacy. Under the influence of alcohol, they forget their mediocrity. Some individuals with epileptic personalities bury in drunken unconsciousness what they realize is coming on. Drunkenness generally may be considered a stigma of an unsound and inadequate mental make-up. Drinking may be compared with automobile driving. An ordinary drink, one jigger of whisky, will compare with 30 miles per hour on the speedometer, which is relatively safe. Two drinks, or an equivalent of 60 to 70 miles per hour, is safe only under certain conditions. The third consecutive drink is comparable to unreasonable speed and should necessitate taking the imbiber under control.

It is estimated that an ounce of hard liquor requires approximately one and one-half hours to metabolize or eliminate. Inasmuch as efficiency cannot be expected while alcohol is effective, one

[1] Piker, Philip; and Cohn, J. V.: Management of Delirium Tremens. *J. A. M. A.*, 108:5:345 (Jan.), 1937.

can estimate his disability period. The effect of repeated small doses is about the same as one large dose. Drunkenness can be estimated by blood analysis or by analysis of the expired air. An alcoholic content of the blood of 100 up to 260 mg. per 100 cc. means that a person does not have complete control of his faculties, while more than 260 mg. means that his control is decidedly uncertain. A pleasant evening at poker with four two-ounce liquor high-balls should mean a rest period of about twelve hours before an operation requiring skill and judgment (and what operation does not?) should be undertaken. The elimination time of alcohol does not seem to be affected by the quantity of water or fruit juice taken. It disappears slowly from the blood. It is thought that alcohol unites with the hemoglobin of the blood like carbon monoxide displacing oxygen. The fate of alcohol in the body is not known; probably instead of being burned in the body as such, it is converted into other substances which are stored or burned. The concentration of alcohol in various organs depends upon the richness of the blood circulation in the organ.

After this, what is to be said in favor of liquor? Aside from the somewhat doubtful medicinal indications, there seems to be little justification for it except the strange paradox that in those countries where the most liquor has been consumed, there has been the greatest advance in what we consider the highest stage of civilization. How this comes about is not clear. Is it because the weak are eliminated by the abuse of alcohol as surely occurs, or does it add something which, when properly used, increases the zest of life of the class of moderate drinkers? It is definitely known that it does not increase efficiency. It can be safely said that alcohol mixes with nothing except leisure and relaxation. Unlike caffeine, it is not a cerebral stimulant and where skill and responsibility are concerned it is definitely a poison. Pharmacologists are agreed that alcohol is wholly depressant. Definite experiments reveal that it "weakens the faculty of judgment and causes premature but faulty or misdirected reactions." However, on a hot summer's day, it is pleasant to contemplate a Tom Collins or a mint julep. Good ice-cold beer from a tin bucket will make any fishing trip a success; a Scotch high-ball will frequently make a pair of aces bluff a a full house; a smart Manhattan or a gorgeous old-fashioned has been the best friend of many a dinner hostess; champagne at a wedding will well-wish any bride; and a Tom and Jerry on a bitter cold New Year's eve will warm the hearts of friends and foes and give a bright outlook for the future.

All this glow of life undoubtedly will disappear again unless liquor dealers and law enforcement bodies keep drunken boys from smashing their brains and the brains of their girl friends against bridge abutments and telephone poles on the highways, unless habitual drunkards are put into institutions for mentally unfit (or at least where they will not be preyed upon by avaricious liquor dealers), and unless women in general get hold of their responsibilities as guardians of the welfare of the race and stop crowding men away from the bar counters. We may expect advertisers, very soon, to have Mrs. Wetmuch, of New York and Newport, telling how this six-month-old whisky helps her digestion, and that she reaches for a jigger instead of a sweet, or that she finds "Old Rotgut" a light drink.

What is the answer? Should not the state board of health be an active part of the liquor control board? The inadequate mind of the mentally unfit, the immature mind of the minor, and the damaged mind of the habitual drunkard are health problems. When liquor gets into the hands of these groups, the persons responsible, and not the general public, should be made to suffer.

THE SEVEN HORSEMEN OF DEATH

For some years past, the daily observations of David Dietz, science editor for the Scripps-Howard newspapers, have been thoroughly enjoyable. His discussions of news from the scientific world are well written and indicate a thorough knowledge of the subject at hand. About the middle of last May, Mr. Dietz began a discussion of the "Seven Horsemen of Death," a series which has aroused favorable comment from all sides. He lists the "horsemen" as follows: heart disease, cancer, nephritis, cerebral hemorrhage, accidents, pneumonia, and tuberculosis. The death toll per 100,000 is given as 239.9, 106.2, 84.2, 79.9, 79.4, 77.3, and 66.6, respectively. More than one-half of the deaths from all seven causes are attributed to heart disease, nephritis, and cerebral hemorrhage, and he attributes one-third of all the deaths in the United States to these three diseases. David Dietz has written these articles dramatically, and has described the sudden onset of some of the afflictions in a manner closely resembling a bang-up "March of Time" radio program.

His description of the emergency room of the modern city hospital is masterful; the reader can not but visualize each of the characters. His word sketch of the sudden attack of coronary disease, in which he tells of the attack as occurring soon after a hearty meal, is a picture known to few outside of the medical profession. (His reference to the hearty meal is timely, since the term *acute indigestion* continues too frequently to appear on death certificates in these cases.)

He characterizes the all too busy business man, the type commonly referred to as a human dynamo who never has time to rest, who "blows up" on every and all occasions, and who in a trice passes out in an attack of coronary disease.

Cancer comes in for a vivid bit of writing; the reader goes with Mr. Dietz into the operating room where he follows every step of the surgeon, from the initial incision to the closing of the wound. He details the search for metastasis in such a way as to leave no doubt in the mind of the reader as to the meticulous care that is taken in surgical cases, and the vital necessity of that care to the welfare of the patient is made clear.

Then comes the build-up of the automotive disaster in which young people are killed or permanently crippled. Yes, he starts this chronicle in the modern road house, a few miles from the city. He narrates the conversation between the waiter and the bartender concerning the advisability of serving just one more drink to the young couple. Then the attempt to drive back to town, the forgotten and unseen bend in the road with its safety posts, the crash, and again the emergency room of the hospital.

With nephritis and tuberculosis, the picture is not so dramatic, perhaps, but it is unceasingly interesting. The medical profession is given due credit for the improvements made in the control of these diseases, and for the marked decrease in their death rates.

Pneumonia is set forth as only David Dietz can relate such things. He begins with a recital of a special airplane trip to a cold bound region of the North, to carry a supply of pneumonia serum to an afflicted district there. He refers to the thirty-two types of pneumonia known to physicians.

Not the least interesting part of this series of health articles is the worth while comment of the author on health matters in general. For example, from the article on pneumonia, we quote a few excerpts: "An exceedingly important part of the treatment of a case of pneumonia is skilled nursing care . . . Never neglect a cold; it may be a prelude to pneumonia. Beware of the notion that you can 'walk off a cold.' . . . The best treatment for a cold is rest in bed . . . Better call the family physician . . . Every family should have a physician whom they know and whom they can trust. His knowledge over the years gives him a tremendous advantage in caring for their health. He will tell you when the services of a specialist or surgeon are needed."

To David Dietz we say, "Thank you," and it comes from the bottom of our hearts. We do hope that this series of health talks may be made available, in some form or other, for general consumption. We have found therein not one thing to criticize. We have found every word commendable, and again we say, "Thanks!"

Look for the preliminary program for the French Lick session in the August JOURNAL.

SOCIAL WORKERS' CONFERENCE

Almost every physician in private practice will recognize and acknowledge the value and the necessity of good social service workers. However, within recent years, their number has reached such proportions that they are beginning to feel their power and, like the labor groups to whom some of their speakers appeal, they attempt to expand their field and to dominate and dictate to other groups.

The sixty-fourth annual national conference of social workers was held in Indianapolis, May 23 to 29, and while many newspapers outside of Indianapolis and the newsmagazine *Time* apparently did not consider the event worth mentioning, its proximity led us to attend. A request to cover the conference would be comparable to an assignment to cover a world war, for the conference was made up of some 350 formal sessions and innumerable unofficial meetings, and attracted to Indianapolis almost every figure of national prominence concerned with social service agencies in addition to aproximately eight thousand workers connected in one way or another with social welfare doings.

In an attempt to hit the high spots of the session, the most important meetings were selected with the idea of obtaining the views of speakers and the reactions of the audiences upon such subjects as socialized medicine, health insurance, cooperative health services, group hospitalization, and hospital insurance. Members of the Woman's Auxiliary to the Indianapolis Medical Society responded to a request for help, and each of the fifty meetings selected was attended and reported upon. In many of the meetings, the subjects previously mentioned were not discussed at all. In those meetings where the subjects were brought up, the reports of the Auxiliary members revealed the intense feeling of not a few of the conference speakers in favor of an expansion of medical services contrary to the present individualistic traditional professional practice.

One of the most significant statements of the entire session, from the standpoint of the medical profession, was that of Senator Robert F. Wagner, of New York, who said: "I am personally convinced that a sound plan of health insurance and provision for adequate medical care can be devised in America which will be acceptable not only to the patient but to the physician." The senator also pledged himself to aid in the plan of establishing a federal department of public welfare with the director as a cabinet officer. Harry Hopkins, national WPA administrator, said that "Something must be done to get adequate medical care for those who cannot afford it. They must receive funds to reimburse them while they are ill."

Dr. J. P. Warbasse, president of the Cooperative League of the United States, painted a surrealist picture of the doctor of the future who will work for the consumer cooperatives. His plan requires

a physician to care for 150 to 200 families, upon whom he will be expected to make 300 to 400 semi-social calls per month—an obviously impossible feat.

At one of the forenoon meetings, Dr. John Kingsbury, well known to Indiana physicians, and Bower Aly, the supposedly neutral sponsor of the high school debate handbook on socialized medicine, spoke in behalf of socialized medicine. Dr. Kingsbury's vitriolic words unmasked a personal wrath and hatred for the American Medical Association which threatens to consume him in its intensity. Apparently this long since demolished his ability to think and plan constructively. Bower Aly rhetorically advocated that the wealth of the community be taxed to supply health measures for the humblest citizen, just as is done in regard to education, and he recommends that the plan be started with the children. He called upon labor leaders to back the movement, saying that "There is not now any force in America which can successfully withstand labor in such a cause, on such an issue," and it would be difficult for any one to deny the correctness of that statement. A comparatively small number of the workers attended this session, but they made up in enthusiasm what they lacked in number.

Dr. R. C. Williams, national medical director of the Rural Resettlement Administration, told of his work, and in the discussion which followed his talk he was severely criticized by the social workers for making agreements with such non-governmental bodies as state medical societies, and one social worker asked what part of the R. A. health administration program had been delegated to the social workers. Discussionists particularly criticized the arrangement whereby a family having a net balance as low as $300 per year should be expected to pay anything for medical care.

Dr. Martha M. Eliot, assistant chief of the U. S. Children's Bureau, of Washington, D. C., was something of an enigma as concerned her stand on socialized medicine. At first it was believed that she was opposed to it; then she seemed to favor it, at least favoring some of the speakers who sponsor it; finally, we concluded that perhaps she is just a good politician, politely favoring her audience.

Throughout the conference, it seemed tacitly accepted that socialized medicine in some form or other is bound to come. However, the workers themselves are so busy with their own problems and the justification of their own existence that they haven't time to attack the medical profession. The impracticalities of the average social service worker are well known to the directors and to the government workers in these fields. The workers feel that they should have a part in every important project, almost to the point that their organization may be considered a racket, since most of its members are feeders at the public trough. They want to establish a federal department with a cabinet officer, not of public health or public welfare, but of *social* welfare. It is easy to imagine that if such a department were established, it would have a social worker at its head and medicine, public health, education and relief agencies might come under its jurisdiction.

The reaction of the public to all these various meetings was interesting, for the public refused to take the social workers half as seriously as they take themselves. Reporters generally commented that "they sure have a lot of funny ideas." It remained for Governor Clifford Townsend to debunk a lot of their high-flown remarks with the following statement: "If some society for the uplift of something or other, or perhaps some amalgamated association of perennial job holders, presumes to blast us in the press or otherwise with criticisms that we have failed to adopt their code of ethics, just tell them that Indiana will get the job completed if any state in the union does. I sometimes lose patience with those of superintellect who would rather sit on the mountain top and shout than come down among the common people and help us work out problems by real physical and mental exertion."

EDITORIAL NOTES

This number of THE JOURNAL finds "ye ed" in the wilds of Ontario, well up in the Lake of the Woods district, aboard a house boat with a most congenial party of friends. We are repeating the experiences of last year when a similar trip afforded one of the most restful vacations in our experience. We trust that a goodly number of our members even now are on vacation, and that those who are not already away are planning to get away from affairs medical for at least a few days. A vacation is just about as necessary to the modern physician as is a postgraduate course, so get into action.

Checking up on venereal disease reports to the Board of Health, we find that there is little increase in the number reported, indicating that our members are not giving much more attention to this duty than they did in years past, notwithstanding the campaign against these diseases recently inaugurated by Surgeon General Parran. Why not play fair in the matter? One of these days, we predict that measures will be instituted which will make this reporting procedure imperative.

John A. Kingsbury continues to hammer the medical profession on every occasion. His tirade at the recent social workers conference in Indianapolis was quite in keeping with his usual attitude toward our profession. We urge our members to read the editorial concerning this meeting in this number of THE JOURNAL.

Ferd Weyerbacher, genial watchdog of Association finances, reports our interest income from investments at the present time as being 3 6/7 per cent. This is a new low, due to the fact that in recent years our funds have been invested in the new government bonds at lower rates of interest. However, our financial status is sound, and we seem to be a long way removed from the use of red ink in making up our financial statements.

One of these days our capital city will have to increase its hotel facilities. Indianapolis is gaining in popularity as a convention city, chiefly because of its central location, and hotels are finding themselves sold out all too frequently. Were it not for reservations made in advance of the last two meetings attended there, we would have had difficulty in finding a room in the downtown section. Make reservations in advance whenever you plan a trip. Only the optimist barges into a hotel and expects to find suitable accommodations awaiting him at any and all times.

President E. D. Clark and Secretary Tom Hendricks report having attended four district meetings during the month of May. Their report indicates the largest attendance at these meetings in the history of the Association. County society secretaries also report an increased attendance at their local meetings, all of which is indicative of a healthful state of affairs, medically speaking.

The net paid membership of our Association on June first was far ahead of that for the entire year of 1936, and it appears that the 1937 membership will exceed 2,900. There really is no good reason why this figure should not be increased, for there are some two or three hundred Indiana physicians who should be members of their local county medical societies, and they would become members if properly approached. The depression years caused some to drop out. A few never have been members. Both of these groups should be enrolled ere the present year ends. Organized medicine has proved its worth these past few years, years in which we have been beset by many problems and many enemies. We have defeated almost every attempt to encroach upon the privileges inherent to the medical profession and we have the right to expect every reputable physician to be one of us.

"Diagnostic waves" seem to sweep various sections of the country. If laymen are to be believed, some physicians are very careless in telling their patients what is the matter with them. Just now in one section of Indiana almost every case of sore throat is called "streptococcic throat," which has a formidable sound to the patient. Many of the patients know of such cases that were quite serious in character, and it may be that a prompt recovery deeply impresses the patient with the idea that *his* doctor is on his toes when it comes to treating these cases, but we advise a bit of discretion in such things.

In spite of admonishments to the contrary, contributors to THE JOURNAL occasionally send their manuscripts typed but *single spaced.* A few days ago we received such a manuscript, well written, and in every way worth the reading by all our members. It was well typed and except for the single spacing it would have gone directly to the printer without editing of any sort. It is a good thing to remember that in sending an article to any publication, it should be double spaced. In most instances, a single spaced manuscript will be returned to the author without reading.

In several states, a man using the name of J. Christie has been calling upon physicians, soliciting instrument repair work. He will return the first work, if the amount of work is small, very satisfactorily, but when he is given a larger number of instruments, he does not return. He is a man of about fifty, slight of build, about five feet six, bald and graying at the edges, wears shell-rimmed glasses, and has a very affable manner. He has worked in states surrounding Indiana, but as yet has not been reported in this state. Forewarned is forearmed.

We fail to understand why medical colleagues cannot guard their words when they express opinions concerning another's work. In the majority of instances, adverse opinions are expressed without a sufficient knowledge of facts and the one who criticizes frequently is in error. A lift of the eyebrows, a sidewise glance, or a shrug of the shoulders while inspecting another physician's work often suffices to start a malpractice suit. No physician is qualified to judge another's work unless he has talked with that physician and is aware of all the circumstances involved.

The 1938 meeting of the American Medical Association will be held in San Francisco. Attendance upon these annual meetings has become

so great that it is necessary for American Medical Association officials to make very careful inspections as to hotel facilities, general headquarters, meeting places, and the like. Here in Indiana we, too, have a similar problem. Our folk have taken to attending our annual conventions in great numbers these past few years, and there are but few places that have adequate accommodations for the session. The desire to know what is new in the field of medicine, plus the opportunity again to meet Tom, Bill and all the others, makes for an ever increasing attendance.

Wisconsin is to be congratulated upon the outcome of the fight against the Biemiller voluntary health insurance bill which was effectually killed by a decisive House vote of 60 to 24. This was one of the most drastic state medicine bills presented to any of our state legislatures. An interesting feature of the vote was that numerous of the Wisconsin "radicals" voted against the bill, probably to the discomfiture of its author. The report of the public hearing which was held in connection with this measure was astounding because of the many favorable elements appearing before the committee. Attorneys made speeches in favor of the bill (probably they were paid representatives of certain groups). A minister from northwest Wisconsin made one of the most vituperative attacks upon the medical profession in this hearing. George Crownhart, executive secretary of the Wisconsin State Medical Society, was the sole opponent to the bill during the hearing, and his presentation in behalf of his organization was masterful, and undoubtedly was largely influential in the final vote. To him and to the Wisconsin State Medical Society should be accorded the highest of commendations by the medical profession of the United States.

Davis and others[1] report a study of 10,000 cases of appendicitis in Providence Hospital, Detroit, over a period of ten years. One of the authors examined more than 98 per cent of the removed appendices and found that the pathological and clinical diagnoses agreed in 85.6 per cent of the cases. The mortality from this group of cases was 3.79 per cent, the chronic cases showing a mortality of 1.30 per cent, and the acute cases reaching 9.92 per cent. The last group is divided into simple acute, acute gangrenous, and acute ruptured cases. The death rate in the simple acute class was 6.57 per cent; acute gangrenous, 8.02 per cent, and the acute ruptured rose to 35.50 per cent. This last figure stresses the grave importance of early diagnosis and operation. An acute pain in the belly offers little excuse for delay and certainly no excuse for physics of any sort.

[1] Davis, James E., Muske, Paul H., Mulligan, Phillip L., and Gutov, Julius. Detroit. Appendicitis. *J.A.M.A.*, Vol. 108, No. 18, May 1, 1937, p. 1498.

The Executive Committee has arranged to start its monthly meetings at nine a. m. rather than at a later hour, in an endeavor to permit the members to get away early in the afternoon. Few of our members realize just what a task this committee has before it each month. Occasionally we have been invited to sit in on a session, and the mass of business confronting the committee each time is astounding. Something should be done to lessen the burden, for a burden it is. It has been suggested that matters expected to require extensive consideration might be referred to a reference committee in advance of the meeting, in the hope that such a sub-committee report might save much time. At any rate, like most other Association committees, this particular group has its work cut out for it, and manages to get it done, even though it requires many hours in the doing.

For the first time in our memory, a President of the United States has seen fit to send an official ambassador to a regular meeting of the American Medical Association with a personal message from the President. James Hamilton Lewis, United States Senator from Illinois, addressed the American Medical Association House of Delegates on June tenth and made it very plain that, in his opinion, medicine and politics are not especially good bedfellows, and that there should be absolutely no connection between the two. Official minutes of this meeting are not yet available, but newspaper reports declared that Senator Lewis had much to say on the subject and that there was no misunderstanding his meanings. Referring to the care of veterans, Senator Lewis is quoted as saying, "I have watched attendance to the poor victims of the world war and have seen something of the service administered to them and the methods of its administration through those who are appointed as political office appointees. These appointees have so imposed upon the government and unhappily the victims of disease until the whole thing has been converted into a political machine that has worked a persecution upon the afflicted and a robbery upon the citizens." He asked that the A. M. A. take the lead from the politicians and erect a frame-work in which there would be none of the present abuses. An indictment such as Senator Lewis has made cannot go unnoticed. He believes that the medical profession, alone, holds the key to the situation. The repercussion of this address by Senator Lewis, a keen student of political affairs and one of the smartest students of economics in this country, will have a very salutary effect upon some of the proposed doings down Washington way. And we should not lose sight of the fact that Senator Lewis was the personal representative of President Roosevelt who had requested that the Senator be granted the privileges of the floor of the House of Delegates.

In spite of the publicity given the matter of fellowship in the American Medical Association, there remains much misunderstanding as to just what constitutes fellowship. All members of county medical societies are members of their state organization and *members* of the American Medical Association, but they are *not* Fellows. To become a Fellow in addition to being a member, one must make application for fellowship on the form prescribed, and pay the annual fee of seven dollars, six dollars of which is for an annual subscription to *The Journal of the American Medical Association*, the largest and best of all medical publications. Many physicians who belong to their local societies and, in addition, subscribe to *The Journal of the American Medical Association*, believe they are Fellows of the A.M.A. This is not true. They have the qualifications and they have paid the required fee in subscribing to *The Journal of the A.M.A.*, but *they are not Fellows*. It should be borne in mind that only Fellows can register and take an active part in the annual A.M.A. meetings. If you plan to attend A. M. A. meetings and you are not a Fellow, you should see your local secretary who will provide you with the necessary application blank. If you do not plan to attend the annual meetings, better sign up for fellowship, anyway; the expense is small and the returns are large. In Indiana last year there were 1,534 physicians who were recorded as Fellows of the American Medical Association. In addition there were 590 *members* who subscribed to *The Journal of the American Medical Association*, and who, without additional cost, could become Fellows. Besides benefitting themselves, their addition to the ranks of the Indiana Fellows would swell our total to 2,124.

The manager of the French Lick Springs Hotel advises that registrations for the October meeting are coming in thick and fast. Time was when a meeting held in southern Indiana showed a registration far below that of meetings held in the central section, but with improved roads, motorists are enabled to reach any point in Indiana within a few hours. If you have not already made your reservation, better attend to it right now. While there are ample accommodations at French Lick, there are many reasons why early registrations are advantageous. The "early birds" are assured of the choicest rooms, ready for occupancy upon arrival. Also, the hotel management, knowing in advance just about how many guests they may expect, are able to make proper preparations for entertainment. French Lick in October affords a little vacation that will please most any one. Its natural setting among the hills of southern Indiana is a most delightful one. Free from the noise and clamor of cities, one can relax completely. For the hiker, there are numerous trails worth exploring. For the golfer, the two courses afford a choice between a leisurely, on-the-level game and the up-hill-and-down-dale course nearby. Various other entertainment features are offered, notably the stag smoker, a party personally arranged by Tom Taggart. Those who attended the smoker on the occasion of our last visit to French Lick will remember with much pleasure the program of men's night. But the ladies have not been forgotten, and there will be something doing every hour of the day for those who wish to be busy while the men folk are otherwise engaged. There is no more delightful spot in which to rest than the broad verandas of the hotel, the peaceful quiet of the Japanese gardens, or the coolness of a shady nook on the spacious lawn. Yes, the time is getting short; better make your reservation today.

The closing of the school year finds us in a position to boast again concerning the remarkable record of the school buses of Indiana in getting children to and from school. During the year just past, school buses traveled with a load a total of twenty-five million miles, hauling approximately 215,000 school children to and from school daily. These buses were driven by a total of 7,224 drivers which drivers made a total of approximately 150,000 miles a day and yet not a single school child was killed. Furthermore, it may be said that no one came very near being fatally injured. There were only three children that might be said to have suffered injuries of any serious consequence. Naturally there were a good many bumps and scratches, but these are inevitable when children are about. It is likely that these children were safer when they were on the school bus coming to and from school than they were in their own homes or even in their own beds. It is an interesting fact that several of the near serious accidents which occurred were due to a careless or drunken driver driving into the rear or side of the school bus, and the bus driver was in no wise to blame. This is the second consecutive year in which such a record has been made. Think of it! In those two years' time, approximately 50,000,000 miles without a fatality! It would be hard to say just how many passenger miles this would be because we are not informed as to what the average number of children is or the average distance hauled, but it would seem likely that it would be as much as 500,000,000 passenger miles. This is a record of which the Indiana State Board of Education has a right to be very proud indeed. The State Board of Health also takes much gratification in this record because the secretary, Dr. Harvey, has had much to do with the designing of the Indiana school buses. All of this shows clearly that highway traffic can be made safe.

AMERICAN MEDICAL ASSOCIATION'S 88TH SESSION

F. S. CROCKETT, M.D.
Lafayette

Being a delegate from Indiana to the American Medical Association is an honor paid for in long hours spent not only in meetings of the House of Delegates, but also in reference committees where proposed resolutions are carefully considered after hearing the divergent opinions of many who are interested in subjects under consideration. These reference committees report back to the House their conclusions and recommendations for action. For the delegate, the session starts on Sunday and ends Thursday with election of officers.

The work of the session was conducted in an atmosphere of greatest harmony. The profession seemed more firmly united in its policies and objectives than for many years past. The approval of the profession at large for the firm stand on social legislation affecting medicine was evidenced by an increase of 6,000 in the membership. This membership of 106,000 is the highest enrollment in the history of the Association.

INDIANA'S INFLUENCE

The influence of the medical profession of Indiana in helping to solve the problems of the national organization was greatly enhanced through the election of Dr. R. L. Sensenich to the Board of Trustees. Dr. Sensenich brings to his new office a world of experience in medical organization as well as unusual knowledge of the difficulties that beset the immediate future of the profession. This knowledge, by the way, he will find opportunity to use in the proposed cooperation of the American Medical Association with the federal administration which the President has invited.

SENATOR LEWIS AND SICKNESS INSURANCE

Judging from the remarks of Senator J. H. Lewis before the House of Delegates, compulsory sickness insurance is not contemplated at present. In its place there will be a plan, financed by the federal government, in which the doctor will be licensed as qualified and then subject to call by anyone entitled to this help. The doctor will send his bill for services rendered to the appropriate federal department and receive his full pay. This sounds like a very desirable plan from our standpoint. We have taken care of these same people without pay for many years. Recently, a small return was made through indigent relief funds. The size of this professional pay was a quite iluminating experience with many of us. We are wondering if the genial Senator had these fees in mind when he addressed the House.

Another point keeps bobbing up in the discussions carried on in the surgical dressing rooms of many of our hospitals. Considerable curiosity exists as to just who will be the "citizens" deemed eligible for these benefits. Surely, it will not be the rich or other members in the upper brackets of society. Will it be limited to those whose earning capacity keeps them below the comfort level of existence? A great deal of sympathy could be found for this illy defined class. Surely, anyone living uncomfortably, or living without the comforts of life, is an object for sympathetic consideration. Isn't it just possible, however, that marked differences of opinion may develop on this very point of where comfortable living begins? Interpretations of this level has shown no unanimity of thought even among those especially gifted social workers who have been working so diligently for the more abundant life. Annual incomes, ranging from $1,200 to $1,800, $2,500 and even $3,000, have been named as possible limits. No doubt locale, environment, occupation and family responsibilities are potent factors in any conclusion. It is quite evident that, in some localities, placing the limit at $1,800 would place 75% or 80% of the population under federal care. Obviously, in such communities, immediate concern must be felt for the final determination of remuneration for medical or surgical services in terms of the income accruing to the medical profession. Distress and consequent deterioration of the members of this profession is not in the interest of the public welfare.

NEW YORK'S RESOLUTION

The resolution from the State Society of New York, while declaring against compulsory insurance, would have committed us to the policy of federal subsidy. It was deemed greater wisdom to reject this and, in its place, offer our full cooperation in helping to work out a solution without being committed to any policy in advance of a full disclosure of legislative aims and purposes.

This offer of cooperation was promptly accepted by the President. It seems certain that the near future will afford opportunity in this regard. Effort will be made by those responsible for carrying out the policies of our National Association to safeguard those vital interests which mean so much to the future of medical science and so intimately concern the welfare of each and every one of us.

There are many who view the development of any social legislation involving medical care with questioning confidence. These feel there can be no assurance that the high hopes and promises that appear in the invitation to cooperate will be discernible when the law emerges in its final form. This lack of confidence, no doubt, will add to the difficulties of implementing any law that fails to give adequate recognition of fundamental principles.

NOTES FROM THE A. M. A. MEETING

In keeping with the custom of many years past, Dr. Irvin Abell, president-elect of the American Medical Association, will deliver the chief address at the annual banquet in French Lick next October. At that time, Hoosier medicine will be able to pay a proper and merited tribute to this favorite son of Kentucky.

Dr. Roscoe L. Sensenich, of South Bend, has been elected to membership on the Board of Trustees of the American Medical Association, and we are proud of the honor that comes to Indiana through him. It has been a long time since our state has had definite recognition from the parent body, but now our cup is filled. We are mightily pleased at the honor conferred upon what we firmly believe to be one of the most active, up-and-doing state medical associations in the country. The American Medical Asosciation may well be proud to have Ross Sensenich in its official family, for he brings to the councils a wealth of experience and enthusiasm, together with more than an ordinary degree of sound business judgment gained over the years in his various capacities as an official in his State Association and in committee work in the parent body. We shall watch the doings of the Hoosier member of the Board, knowing full well that his activities will redound not only to his own credit but to the credit of the American Medical Association and our own Indiana State Medical Association.

Press reports indicate that the Federation of Catholic Physicians' Guilds has termed the action of the American Medical Association in recognizing birth control as "paganistic," and that such action would tend "to make the medical practitioner the grave digger of the nation." Birth control, properly exercised, should be a factor for betterment in our economic set-up, and if it is to come (indeed, is it not already here?), it certainly should be under the surveillance of the medical profession.

The American Medical Association has been honored in the naming of Dr. Irvin Abell, of Louisville, Kentucky, as president-elect. This recognition was a merited one, for Dr. Abell has been an indefatigable worker in the various branches of organized medicine. His election, coming as it did on the fortieth anniversary of his graduation in medicine, and after a service of more than fifteen years as a member of the House of Delegates, is a tribute to his sterling worth in medical affairs. He brings to the American Medical Association a wealth of knowledge on medical matters and a zeal for doing things possessed by few physicians.

Do you realize that if the government assumed the obligation of caring for the medical indigent, the cost would be a tremendous annual figure—probably several billion dollars?

Indiana was represented only once on the scientific program of the A. M. A. meeting. Surely we have more to offer than that! There was no dearth of representation in the political sessions, but we would like to see more Indiana men listed as speakers in the medical sessions.

It seems to us that the press has over-played and kicked up an unnecessary furore in regard to the action taken by the House of Delegates of the American Medical Association upon the subject of birth control. The result has been an unfortunate reaction on the part of those who favor and those who are opposed to birth control. After several years of careful thought and discussion upon this highly controversial and difficult subject, without a single dissenting vote, the House of Delegates at the Atlantic City session accepted the following recommendations of its special committee which had studied the subject thoroughly for many months:

"1. That the American Medical Association take such action as may be necessary to make clear to physicians their legal rights in relation to the use of contraceptives.

"2. That the American Medical Association undertake the investigation of materials, devices and methods recommended or employed for the prevention of conception, with a view to determining physiologic, chemical and biologic properties and effects, and that the result of such investigations be published for the information of the medical profession.

"3. That the Council on Medical Education and Hospitals of the American Medical Asosciation be requested to promote thorough instruction in our medical schools with respect to the various factors pertaining to fertility and sterility, due attention being paid to their positive as well as to their negative aspects."

One of the most obvious developments within recent months that became apparent during the Atlantic City session is the attempt on the part of certain groups and certain publications to "sell" the public the idea that the American Medical Association does not really represent the true feeling of the rank and file of the profession in regard to questions of socialized medicine and similar medical problems. These groups and these publications apparently are attempting to drive a wedge between the official staff of the Association and its membership. A recent incident illustrating this tendency is the statement that appears in *Time* magazine for June 21 in regard to the recent two-volume survey of the American Foundation called "American Medicine — Expert Testimony Out of Court" which reads, "These books contained the recommendations of two thousand doctors for remedying the state of U. S. Medicine, including difficulties of sick people in getting good medical services and the difficulties of good doctors in earning a decent living. Deliberately omitted from those questioned were doctors who might have an ax to grind such as the executives and trustees of the American Medical Association," and later on the same article reads, "The A. M. A.'s executives and trustees were vigilantly prepared to balk Dr. Kopetzky's plan for the minor reason that Miss Lape (who conducted the American Foundation survey) had not consulted them, and for the major reason that it predicated a drastic reversal of Orthodox Medicine's most basic tenets." The A. M. A. is a thoroughly democratic institution and as far as Indiana is concerned, the A. M. A. does represent the opinion of the rank and file of the physicians in the state, and holds the complete confidence of the Indiana profession. When, oh, when will American Foundations, government officials and lay organizations learn that the one and only group that can speak for American medicine as a whole is the House of Delegates and the official heads of the American Medical Association?

ACTIVITIES OF HOOSIER PHYSICIANS AT THE A. M. A. MEETING IN ATLANTIC CITY

More than 125 physicians from Indiana took prominent parts in the scientific and medical economic phases of the discussions during the eighty-eighth annual convention of the American Medical Association in Atlantic City, June 7 to 11.

Dr. R. L. Sensenich, of South Bend, was elected for a term of five years as a member of the board of trustees of the A. M. A., the first time in more than twenty years that an Indiana physician has held such a position in the Association. The last Hoosier member of this board was Dr. Charles A. Daugherty, of South Bend, father-in-law of Dr. Sensenich.

Dr. F. S. Crockett, of Lafayette, served as chairman of the reference committee on medical education and hospitals.

Dr. Norman M. Beatty, of Indianapolis, appeared before the reference committee of the House of Delegates and voiced for the Indiana profession disapproval of the resolution presented by the New York delegates.

Dr. Leonard A. Ensminger, Indianapolis, represented Indiana at a meeting of state postgraduate committee chairmen and helped to formulate plans for extension of this work.

Dr. A. G. Kammer, of East Chicago, spoke on "Torch Oil Dermatitis" before the Section on Dermatology and Syphilology.

Dr. D. R. Ulmer, of Terre Haute, with some fifty other physicians from all parts of the United States, acted as demonstrator in connection with the special exhibit on fractures. Old and new technics in the practical application of plaster of paris were shown.

A new method in the treatment of infant diarrhea was presented by Drs. Matthew Winters, Charles A. Tompkins and Miss Grace Washburn, all of Indianapolis.

An exhibit giving scientific data in regard to alcohol consumption was shown by Drs. H. R. Hulpieu and E. B. Lamb of the Department of Biochemistry and Pharmacology of the I. U. School of Medicine. The exhibit was prepared by them and Dr. R. N. Harger, who did not attend the session.

Motion pictures on obstetrics, gynecology and abdominal surgery were shown, one of which, "Analgesia in Labor," was prepared by Dr. C. O. McCormick, of Indianapolis.

Delegates and alternates who attended included Dr. D. F. Cameron, Ft. Wayne; Dr. F. S. Crockett, Lafayette; Dr. R. L. Sensenich, South Bend; Dr. H. G. Hamer, Indianapolis; Dr. George Dillinger, French Lick; Dr. A. M. Mitchell, Terre Haute; Dr. Walter Kelly, Indianapolis.

Indiana registrants at the A. M. A. meetings are given below:

Applegate, F. M., Corydon.
Baker, H. M., Evansville.
Beatty, N. M., Indianapolis.
Bohner, C. B., Indianapolis.
Bowers, J. W., Fort Wayne.
Bruetsch, W. L., Indianapolis.
Bulson, E. L., Fort Wayne.
Butler, R. A., Beech Grove.
Cacia, J. J., Newburgh.
Cameron, D. F., Fort Wayne.
Carter, L. D., Indianapolis.
Cartwright, E. L., Fort Wayne.
Cassady, J. V., South Bend.
Chen, K. K., Indianapolis.
Clark, E. D., Indianapolis.
Combs, C. N., Terre Haute.
Combs, P. B., Evansville.
Cooper, H. L., South Bend.
Covalt, D. A., Muncie.
Crimm, P. D., Evansville.
Crockett, F. S., Lafayette.
Davidson, W. D., Evansville.
Day, J. T., Indianapolis.
Dillinger, Geo., French Lick.
Dugan, T. J., Indianapolis.
Dunn, F. W., Muncie.
Ebert, J. W., Indianapolis.
Eckhart, G. G., Marion.
Ensminger, L. A., Indianapolis.
Ferguson, A. N., Fort Wayne.
Fish, C. M., South Bend.
Fisher, L. F., South Bend.
Forster, N. K., Hammond.
Gaddy, E. T., Indianapolis.
Garceau, G. J., Indianapolis.
Gastineau, F. M., Indianapolis.
Gillespie, G. R., Brownstown.
Giordano, A. S., South Bend.
Gitlin, M. M., Bluffton.
Glock, H. E., Fort Wayne.
Graham, A. B., Indianapolis.
Green, W. L., Columbus.
Habich, Carl, Indianapolis.
Hamer, H. G., Indianapolis.
Harstad, C., Rockville.
Harvey, V. K., Indianapolis.
Hays, E. L., Indianapolis.
Heller, N. L., Dunkirk.
Hendricks, T. A., Indianapolis.
Hippensteel, R., Indianapolis.
Hudson, F. J., Indianapolis.
Iske, P. G., Indianapolis.

Johnson, S. L., Evansville.
Kahan, H. L., Gary.
Kammer, A. G., East Chicago.
Kelly, W. F., Indianapolis.
Kempf, G. F., Indianapolis.
Ketcham, J. M., Indianapolis.
Klain, B. V., Indianapolis.
Klepinger, H. E., Lafayette.
Kohlstadt, K. G., Indianapolis.
Kraft, B., Indianapolis.
Kruse, E. N., Fort Wayne.
Kuhn, H. A., Hammond.
Lapenta, V. A., Indianapolis.
Lindenmuth, E. O., Indianapolis.
Lyon, M. B., South Bend.
Lyon, Jr., M. W., South Bend.
Lyons, Jr., R. J., Bloomington.
McBride, N. S., Terre Haute.
McCaskey, C. H., Indianapolis.
McCormick, W. C., Terre Haute.
McDonald, R. M., Mishawaka.
Martin, G., Seymour.
Merritt, F. W., Gary.
Mettel, H. B., Indianapolis.
Miller, H. A., Marion.
Mitchell, A. M., Terre Haute.
Molt, W. F., Indianapolis.
Montgomery, L. G., Muncie.
Mozingo, A. E., Indianapolis.
Murdock, H. L., Fort Wayne.
Murphy, E. W., Lanesville.
Nafe, C. A., Indianapolis.
Norman, W. H., Indianapolis.
Otten, R. E., Darlington.
Peck, F. B., Indianapolis.
Petranoff, T. V., Indianapolis.
Price, M. D., Nappannee.
Radcliffe, F. E., Bourbon.
Ravdin, M., Evansville.
Rhamy, B. W., Fort Wayne.
Rice, T. B., Indianapolis.
Ricketts, J. W., Indianapolis.
Robinson, C. C., East Chicago.
Rosenak, B. D., Indianapolis.
Rosenheimer, G. M., South Bend.
Rothberg, M., Fort Wayne.
Ruddell, K. R., Indianapolis.
Rutherford, C. W., Indianapolis.
Schwartz, D. I., Fort Wayne.
Segar, L. H., Indianapolis.
Sensenich, R. L., South Bend.
Short, J. T., Fort Wayne.
Shuler, L. L., Indianapolis.
Sluss, D. H., Indianapolis.
Snider, B., Indianapolis.
Spangler, J. S., Kokomo.
Stygall, J. H., Indianapolis.
Swanson, J., Fort Wayne.
Taylor, F. W., Indianapolis.
Thornton, H. C., Indianapolis.
Ulmer, D. R., Terre Haute.
Van Buskirk, E. M., Fort Wayne.
Vandivier, H. R., Terre Haute.
Warvel, J. H., Indianapolis.
Weyerbacher, A. F., Indpls.
Whallon, A. J., Richmond.
Wheeler, H. H., Indianapolis.
Whitlock, M. E., Mishawaka.
Winters, M., Indianapolis.
Wise, W., Indianapolis.
Witherspoon, J. T., Indianapolis.
Yoder, A. C., Goshen.
Ziliak, A. L., Princeton.

Under the Capitol Dome

Offices of the state board of medical registration and examination will be closed from Aug. 1 to 17. Physicians having urgent business with the board are asked to contact Dr. William R. Davidson, of Evansville, secretary.

Results of state board examinations taken by 132 candidates in Indianapolis the week of June twenty-first will be reported in a later issue.

The state clemency commission has refused to parole Everett Morris who is serving a ten-year state prison sentence for participation in the robbery of a doctor at Mt. Etna, Huntington County. Morris and some companions called upon the physician under pretense that one of them was ill and lured him to his office. The robbery occurred in 1931. Morris was convicted in the Huntington County Circuit Court.

More than 57,000 individuals are receiving benefits from the federal-state-county public assistance program, according to Thurman A. Gottschalk, state public welfare administrator.

The statistics, based on the month of May, showed that 38,670 persons received old age assistance totalling $596,781 during the month, an average for the state of $23.51. One-half of this type assistance is paid by the federal government, approximately thirty per cent by the state, and twenty per cent by the county.

Assistance to dependent children in their own, or homes of specified relatives, was paid for about 17,330 children representing 7,421 families in the amount of $212,900, or an average of $12.28 per child. The federal government paid approximately forty per cent, the state thirty-three per cent, and the county, twenty-seven per cent.

Blind recipients, totalling 1,860 received $33,332 an average of $17.89. The state and federal government each provide half the cost of this assistance.

NEWSPAPERS SUPPORTING CAMPAIGN TO ERADICATE SYPHILIS

Indiana newspapers are giving wholehearted support to the Indiana State Medical Association and State Board of Health campaign to eradicate syphilis.

Tristram Coffin, director of the State House News Bureau, has prepared a series of articles dealing particularly with the state's program. These articles were mailed to practically every newspaper in the state, including both the dailies and weeklies. A check of the newspapers revealed a widespread use of the articles, particularly in the county seat publications, Mr. Coffin reported.

Only a few papers used the first of the series, but subsequent releases were almost universally published. Apparently the more timid editors were awaiting the reaction of other publishers to the series. When the more daring editors gave space to the original articles, the others followed their example.

A typical "release" from the news bureau was an item of about 350 words. One, for example, showed that syphilis adds about $500,000 annually to the cost of maintaining state hospitals, and that more than twenty per cent of patients in the five state hospitals for the insane are syphilitic. It pointed out that treatment is available in every Indiana community and that the State Board of Health will make blood tests and provide medication for persons unable to pay for this service. This particular "release" concluded with the statement that: "The local health officer, family physician, State Board of Health or any reputable physician in the community can offer advice and treatment to victims of the disease."

Information for the series was provided by Dr. Verne K. Harvey, secretary of the State Board of Health, and Dr. Max A. Bahr, superintendent of the Central Indiana Hospital.

DEATHS

James Wilson Stewart, M.D., of Logansport, died May twenty-fifth, aged eighty years. Dr. Stewart served as first intern at the Indianapolis City Hospital. He graduated from the Louisville Medical College in 1877 and the College of P. and S. of Indiana in Indianapolis in 1878 and later studied abroad. He had practiced at Logansport for many years and was widely known in his community.

Ringgold Scott Mitchell, M.D., of Washington, retired physician, died May twenty-seventh, aged eighty-five years. Dr. Mitchell suffered a broken hip on April tenth, and had been in failing health since that time. He was a graduate of the Kentucky School of Medicine, Louisville, in 1882.

Theodore Elliott Collier, M.D., of Brook, died May twenty-ninth. Dr. Collier was seventy-four years old. He graduated from the Medical College of Indiana, Indianapolis, in 1893.

Madison L. Williams, M.D., Negro physician of East Chicago, and his wife were killed in an automobile accident in Murfreesboro, Tennessee, May thirty-first. Dr. Williams was fifty-six years old. He graduated from the Meharry Medical College, Nashville, Tennessee, in 1910.

HOOSIER NOTES

Dr. John F. Barnhill, of Indianapolis, was elected president of the American Laryngolical Society at the meeting held in Atlantic City in June.

Dr. William F. Molt, of Indianapolis, was made vice-president of the American Bronchoscopic Society at the meeting held in Atlantic City in June.

Nearly 100,000 new members were enrolled during the first enlistment week of the Women's Field Army of the American Society for the Control of Cancer. It is estimated that at least twenty times that number of women heard, for perhaps the first time, facts about the early symptoms of cancer.

Dr. and Mrs. J. C. Sharrer, of Francesville, celebrated their 58th wedding anniversary, June eleventh.

Dr. Carl Parker has announced his intention to move from Danville to Wingate where he will be associated with Dr. F. D. Allhands. Dr. Parker plans to begin his practice at Wingate about July first.

Dr. Charles S. Bond, of Richmond, celebrated his eighty-first birthday, June eighth. Dr. Bond has practiced in Richmond since 1883, and during that time has served as Wayne County Coroner and city health officer.

Dr. and Mrs. E. E. Long, of Shoals, spent their June vacation in Cleveland, visiting their daughter and attending the high school commencement exercises in which their grandson participated. Dr. and Mrs. Long also attended the Great Lakes Exposition.

Dr. Benjamin V. Klain and Miss Evelyn Epstein, both of Indianapolis, were married June 6 in Indianapolis.

At the meeting of the American Academy of Tuberculosis Physicians in Atlantic City, June ninth, Dr. J. H. Stygall, of Indianapolis, was elected officer of sessions. Dr. J. A. Myers, of Minneapolis, was made president.

The sixteenth annual session of the American Congress of Physical Therapy will be held in Cincinnati, September 20 to 24.

Dr. Albert T. Jones, of Indianapolis, and Miss Geneva Stoner, of Pendleton, were married May thirtieth in Pendleton. They will reside in Indianapolis.

Dr. L. G. Montgomery, of Muncie, was elected president of the Muncie Academy of Medicine at the meeting held June 1. Dr. Montgomery succeeds Dr. T. R. Owens. Dr. John Bowles was made vice-president, and Dr. T. R. Hayes, secretary, and Dr. W. J. Molloy, treasurer, were re-elected.

New officers of the Fort Wayne Medical Society, who took office June first, are Dr. E. D. Smith, president; Dr. Edward H. Kruse, vice-president; Dr. R. L. Hane, secretary, and Dr. E. L. Cartwright, treasurer. The annual spring outing of the society was held June fifteenth, at the Orchard Ridge Country Club.

Dr. H. L. Bernheimer, of Terre Haute, has presented his complete x-ray equipment to the Rose Polytechnic Institute.

The Medical Women's National Association has changed its name and is now the American Medical Women's Association in accordance with action taken at its annual meeting in Atlantic City, June 7.

According to newspaper report, controlling stock in the Frank S. Betz Company, of Hammond, has been sold to Roger D. Edwards, of New Bedford, Massachusetts.

Mrs. Laura Leonard, wife of Dr. H. S. Leonard, of Indianapolis, died May twenty-first in an Indianapolis hospital.

Dr. Donald I. Dean, of Rushville, and Miss Barbara Duncan, of Indianapolis, have recently announced their marriage which occurred August 22, 1936. Dr. and Mrs. Dean will reside in Rushville.

Dr. C. P. Clark, of Indianapolis, is the new president of the Indianapolis Eye, Ear, Nose and Throat Society. He succeeds Dr. Harry A. Van Osdal.

The Indiana Dietetic Association held its annual spring meeting in Indianapolis, May twenty-first and twenty-second. Dr. W. D. Gatch, of Indianapolis, and Miss Lute Troutt, president of the American Dietetic Association, were guest speakers, as also was Dr. Thurman B. Rice, of Indianapolis, who talked about "Unwelcome Guests."

Dr. S. S. Delancey, who has practiced medicine in Williamsport and vicinity for forty-three years, received 200 postal cards congratulating him on his seventy-seventh birthday, May third.

Dr. W. D. Gatch, of Indianapolis, was guest speaker at the Saginaw, Michigan, County Medical Society, June fifteenth. His subject was "Surgical Prognosis."

Dr. A. E. Hubbard, medical director of Sunnyside Sanatorium, at Indianapolis, and Miss Erma Rea Brown, of Abilene, Kansas, were married June fifteenth. They will be at home at Sunnyside after July fifteenth.

Dr. William F. Molt, of Indianapolis, spent three weeks in Atlantic City attending the meetings of the American Laryngological Society, the American Bronchoscopic Society, the Triological Society, and the American Medical Association.

Dr. Vincent Lapenta, of Indianapolis, has been made a member of the Council of Examiners of the International College of Surgeons. Announcement of the appointment was made at the time of the meeting of the organization in New York City, May 31. Other members of the council are Dr. Oscar B. Nugent, Chicago, and Dr. George S. Duntley, Macomb, Illinois.

The radio broadcasts sponsored by the American Medical Association have been discontinued until fall.

Dr. William B. Challman, of Mt. Vernon, is doing postgraduate work in Vienna. He will return to his practice in Mt. Vernon early in September.

Dr. Lowell R. Stephens, a native of Indianapolis, has opened his office for the practice of pediatrics in Muncie.

Dr. and Mrs. Frank E. Wiedemann, of Terre Haute, have returned from a trip around the world. They sailed on the Hamburg-American line, and were gone five months. Dr. Wiedemann notes a great improvement in world sanitation and scientific application of medicine since his last trip around the world, ten years ago.

The Indiana Association of Clinical Psychologists has recently been organized for the purpose of promoting high standards in psychological work in the State of Indiana. Membership requirements are designed to define the need for adequate training before an individual can be considered a professional psychologist. They hope to assist schools, businesses, industries and anyone else who may employ a psychologist, to get only the services of genuinely sound and qualified persons. Present officers are C. M. Louttit, Ph.D., president; Hazel Hansford Stevens, Ph.D., vice-president; Harriet E. O'Shea, Ph.D., secretary-treasurer. Gladys D. Frith, M.D., Ph.D., is a member-at-large of the Executive Committee.

INDIANA UNIVERSITY NEWS NOTES

At the 108th annual commencent exercises of Indiana University held Monday evening, June 14, in Memorial Stadium, the following 97 were awarded the doctor of medicine degree:

Noel Bailey, Peru; Harry Baum, Madison; Raymond Bennett, Hammond; Sol Berman, Elizabeth, New Jersey; Joseph Bernstein, Indianapolis; Louis Bixler, Elkhart; Edward Bloemker, Indianapolis; Asa Bloom, Marion; Richard Bloomer, Rockville; Lester Borough, South Bend; Kenneth Brown, New Albany; Arthur Burnett, Paragon; Donald Caseley, Greencastle; Lintner Clark, Muncie; Melvin Coffel, Kokomo; Walter Cohn, Indianapolis; Marion Connerley, Terre Haute; Carl Colbertson, Vevay; Marvin Cuthbert, Kokomo; Naomi Dalton, Bloomington; Fred Dick, Jr., Huntington; Ramon Dubois, Kokomo; John Eisterhold, Evansville; James Engeler, Decatur; Harold Ericson, Windfall; Asa Fender, Bedford; James Fuelling, Woodburn; James Funkhouser, Indianapolis; Dee Gill, Indianapolis; Wait Griswold, Indianapolis; William Hart, Indianapolis; E. Blair Harter, Hagerstown; Ramon Henderson, Ridgeville; Marshall Hewitt, South Bend; Theodore Hilbish, Bristol; Harold Hill, Indianapolis; Lowell Hillis, Logansport; Cecil Hurst, East Chicago; Robert Husted, Woodburn; William Hutto, Kokomo.

Thomas Johnson, Dunkirk; Hunter Kennedy, Indianapolis; Dillon Kennington, Michigan City; Joseph Larmore, Anderson; Mrs. Sarah Hiestand Larmore, Pennville; Donald Lashley, Evansville; Melvin Lichtenberg, Indianapolis; Jack Loudermilk, Indianapolis; George McCoy, Bloomfield; Max Mansfield, Indianapolis; Howard Marks, Sullivan; Simon Mendelsberg, Brooklyn, New York; Herman Meyer, North Manchester; Stephen Michaelis, Fort Wayne; Hugh Miller, Elkhart; Leonard Miller, Indianapolis; Richard Miller, North Vernon; Robert Miller, Somerville; Ralston Mitchell, Indianapolis; Raymond Modjeski, Hammond; Mary Alice Norris, Indianapolis; Paul Pentecost, Liberty; Ogden Pinkerton, Lowell; Wendell Preston, Indianapolis; Walter Ramage, Garrett; Russell Reynolds, Garrett; Floyd Romberger, Jr., West Lafayette; Meyer Rosenberg, Brooklyn, New York; Harry Rotman, Jasonville; Robert Royster, Evansville; Alfred Scales, Stendal; Frank Scott, Shelbyville; Kenneth Sheek, Greenwood; James Sims, Indianapolis; Robert Smithson, Evansville; Gerald Somers, Fort Wayne; Joseph Spalding, Indianapolis; John Spears, English; Frederic Spencer, Kempton; Sydney Stevens, Indianapolis; James Stewart, Marion; William Strang, Indianapolis; Martin Strange, Loogootee; Richard Swan, Indianapolis; Benet Thayer, Indianapolis; E. Paul Tischer, Indianapolis; James Topolgus, Gary; William Tranter, Franklin; Warren Tucker, Salem; Robert Vandivier, Franklin; Charles Voorhiss, Indianapolis; Francis Williams, Jr., Anderson; Robert Williams, Anderson; Oliver Wilson, Frankfort; Ralph Wolfe, Sullivan; William Wood, Evansville; Halden Woods, Yoder.

The doctor of medicine degree cum laude was awarded to Dr. Philip L. Kurtz, of Indianapolis. Dr. Kurtz, graduate residence in the Indianapolis City Hospital, wrote his thesis on "An Experimental Index of Erythropoietic Function in Rabbits."

The following 32 girls were awarded the Graduate Nurse degree at the commencement activities: Marcella Brandyberry, Decatur; Helen Brown, Franklin; Mary Bruner, Greenfield; Dorothy Burks, Bloomington; Ninetta Chapman, Bloomington; Virginia Engelbrecht, Fort Wayne; Lilla Fell, Indianapolis; Margaret Gill, Indianapolis; Hazel Grundon, Mount Carmel, Illinois; Ada Guge, West Middleton; Agnes Jacobs, Madison; Helen Jones, Boswell; Katherine Kenworthy, Monrovia; Marie McKay, Port Huron, Michigan; Mary McKittrick, Plainville; Marjorie Mayes, Elkhart; Evelyn Miller, Osceola; Florence Miller, Auburn; Edna Myers, Fillmore; Ruth Otter, Madison; Meredith Reeves, Greencastle; Thelma Ripley, Lafayette; Ruth Sharpe, Noblesville; Mary Kathryn Shepherd, Plainville; Evelyn Shrock, Kokomo; Maxine Singer, Indianapolis; Lois Skelton, Rockville; Rose Smith, Bloomington; Josephine Sugars, Indianapolis; Beth Tawney, Vincennes; Bessie Van Blair, Indianapolis; Gail Young, Ladoga.

The 45 recipients of the Doctor of Dental Surgery Degree were as follows: Benjamin Adler, Paterson, New Jersey; Kingdon Avery, Hammond; Charles Bass, Buffalo, New York; Sidney Bell, Bridgeport, Connecticut; Oscar Bodenberg, Indianapolis; James Bunnell, Jr., Erin, Tennessee; George Carpenter, Brazil; Richard Cutrera, Oak Park, Illinois; Francis Denbo, Terre Haute; Lewis Domonkos, South Bend; James Enmeier, Vincennes; Benjamin Fisher, Indianapolis; Philip Fogle, Indianapolis; Loras Gardner, Indianapolis; Ronald Gardner, Gary; Bernard Goldman, Cincinnati, Ohio; Edward Goll, Indianapolis; Joseph Hammon, Chicago, Illinois; Harold Haskings, Gallipolis, Ohio; John Hunt, Anderson; Clyde Ingels, Gallipolis, Ohio; Keith Jones, Muncie; Wade Jordan, Indianapolis; Marvin Judd, Austin; John Ketcham, Lapel; Arnold Kirchoff, Freelandville; Max Knierim, Indianapolis; John Long, Indianapolis; Gwynn McCord, Veedersburg; Lawrence Merkley, Indianapolis; Alfred Milteer, Gary; Joseph Minnis, Jr., Terre Haute; Richard Misselhorn, Kendallville; Donald Myers, Homer, Illinois; James Nicolai, Terre Haute; John Reuthe, Muncie; Thomas Riddell, Indianapolis; Martin Roschelle, New York City; Michael Shelsy, Pittsfield, Massachusetts; Willard Stamper, Indianapolis; Richard Stoelting, Freelandville; Wilfredo Torres, Arecibo, Puerto Rico; Rupert Weeks, Greenbrier; William

Welker, Rio Grande, Ohio; James Williams, Paris, Illinois.

The Bachelor of Science degree in medicine was granted to the following 78 students: Eugene Austin, Anderson; Robert Badertscher, Bloomington; Leslie Baker, Aurora; Linville Baker, Cambridge City; Raymond Bennett, Hammond; Asa Bloom, Marion; Thomas Brady, Gary; Henry Brocksmith, Freelandville; George Brown, Greenwood; Melvin Coffel, Kokomo; Hubert Collins, McCordsville; Paul Connell, Indianapolis; Carl Culbertson, Vevay; Ramon Dubois, Kokomo; Henry Earhart, Mulberry; James Engeler, Decatur; Paul Evans, Indianapolis; Brice Fitzgerald, Hammond; Laurel Foxworthy, Indianapolis; William Gambill, Terre Haute; A. Elizabeth Garber, Dunkirk; Louis Gilbert, Mishawaka; Charles Gillespie, Indianapolis; John Graham, Indianapolis; Ted Grisell, Fort Wayne; Bernard Hall, Walton; George Hammersley, Frankfort; Martin Harshman, Mulberry; Kenneth Hill, Washington; Phillip Hodgin, Lynn; Jack Hill, Fowler; James Hundley, Summitville; Robert Husted, Woodburn; William Johnston, Wabash; Paul Jones, Dugger; Forest Kendall, Marion; Robert Kepler, LaPorte; Carroll Kern, Lakewood, Ohio; Donald Lashley, Evansville; Melvin Lichtenberg, Indianapolis; Milton McCall, Hammond; George McCoy, Bloomfield; Roy McCoy, Williams; Voris McFall, Muncie; Robert McTurnan, Indianapolis; Max Mansfield, Indianapolis; Lawrence Maurer, Goshen; Ralston Mitchell, Indianapolis; Marion Morris, Indianapolis; Louis Nie, Huntington; Abraham Owen, Nashville; Delbert Parsons, Greentown; Paul Rieth, Goshen; Samuel Richter, Greentown; Glynn Rivers, Muncie; Howard Romack, Greenfield; Franklin Rudolph, Lowell; Robert Salassa, Logansport; Robert Scott, Indianapolis; Harry Sherster, Indianapolis; Gerald Somers, Fort Wayne; John Spears, English; Everett Steele, Sullivan; David Stone, Indianapolis; Ames Templeton, South Bend; Benet Thayer, Indianapolis; William Tipton, Brazil; Julius Travis, Indianapolis; Richard Trockman, Evansville; James Walker, Indianapolis; Charles Walters, Mishawaka; Carroll Warren, Marshall; John Warren, Winchester; Ward Warren, Marshall; Fielding Williams, Dale; Robert Williams, Anderson; Ralph Wilmore, Winchester; Edwin Wunderlich, Logansport.

The Indiana State Medical Association will hold its 88th annual convention in French Lick, October 4, 5, and 6. Plan to be there.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION
THE EXECUTIVE COMMITTEE

May 23, 1937.

Roll call showed the following present: C. A. Nafe, M.D., chairman; C. H. McCaskey, M.D.; E. D. Clark, M.D.; M. A. Austin, M.D.; A. F. Weyerbacher, M.D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary.

Minutes of the meeting of April 4 approved upon the motion of Dr. McCaskey, seconded by Dr. Clark.

The monthly statements of Receipts and Expenditures for April and the report of the Budget for April for the Association committees and THE JOURNAL were presented.

Membership Report

Number of members on May 22, 1937	2,856
Number of members on May 22, 1936	2,714
Gain over last year	142
Number of members Dec. 31, 1936	2,836

Treasurer's Office

Dr. Weyerbacher reported that the average interest from securities held by the Association is 3 6/7%. This rate of interest will gradually decrease as interest on the new government bonds is not as high as on the old.

1937 Session at French Lick

(1) *Commercial exhibit.* 20 exhibit spaces sold; 11 to be sold.

(2) Chairman of scientific exhibit committee and secretary to make a trip within the next month in regard to scientific exhibits.

Postgraduate Course

General agreement was that the course was fine in every respect. Several suggestions in regard to minor details received and forwarded to committee.

Letter received in regard to the conference of state postgraduate chairmen at Atlantic City on Thursday, June 10. The Executive Committee instructed the secretary to notify all members of the state graduate education committee of this meeting in case they desire to attend.

District Meetings

The following district meetings were attended by the president and the executive secretary and reports were that generally the attendance at the meetings was the largest and the programs were best in the history of the Association:

8th District—Anderson, May 8.
9th District—Crawfordsville, May 18.
11th District—Wabash, May 19.
6th District—Greenfield, May 20.
Meeting to be attended: 1st District—Evansville, June 17.

Future Meetings of the Executive Committee

The Committee felt that in the future the meetings of the Executive Committee should be called at 9 a. m. instead of 10:30 in order that the members may get away early in the afternoon. The next meeting is to be held the middle of July.

Commendation of Articles in The Indianapolis Times

A series of articles entitled, "The Seven Horsemen of Death," by David Dietz, has appeared in The Indianapolis *Times*. The Committee passed a motion commending the *Times* upon these articles and instructed the secretary to obtain enough copies of these articles so that each member of the Executive Committee has a set and to call the articles to the attention of the editor of THE JOURNAL and the chairman of the Bureau of Publicity.

Legislative, Legal and Social Security Matters

Biemiller Bills in Wisconsin. Along with the general development of cooperatives are the six Biemiller bills which have been introduced in Wisconsin, one of them calling for the formation of health cooperatives and another legalizing group hospitalization schemes. If this group hospitalization legislation passes, such schemes may be organized outside of the present laws governing insurance companies. (Latest

word from Wisconsin is that the cooperative medicine bill was reported out of committee for passage with a vote of 4 to 2. The compulsory sickness insurance bill was reported out of the same committee with a vote of 4 to 2 for indefinite postponement. Another of the Biemiller bills which would provide an interim committee to study the cost of medical care was likewise reported out for killing with a vote of 4 to 2.)

Social Service Conference in Indianapolis. The Committee authorized a complete report made upon the conference.

Admission of Patients to State Hospitals. Complaint in regard to the fact that physicians receive no compensation for the admission of patients to certain state hospitals brought to the attention of the Committee. The Executive Committee referred this matter to the state Legislative Committee.

Social Security Taxes. Review by Dr. Woodward of the Social Security taxes was referred to Albert Stump. Report upon this was to be made by Mr. Stump at the next meeting of the Committee.

Medical Economics

Complaint from physician of Lyons, Indiana, concerning medical fees received for the care of the indigent sick and for making tuberculin tests, etc., brought to the attention of the Committee. The informal letter from the headquarters in regard to these matters was considered sufficient answer to the complaint.

Article in Better Business Bureau Bulletin concerning "Dr." J. R. Scherer, head of the Irvington Clinic. The Committee authorized that copies of these bulletins be sent to the secretary of each county medical society in the state.

Venereal Disease Control Program

Certain newspapers and social service groups are advocating the establishment of free venereal clinics throughout Indiana to be paid for by state and federal grants.

County Society Organizations

White County Medical Society is not active. The Executive Committee was of the opinion that if White County would join with some other society, the difficulty might be solved.

Medical Relief Services

Letter received from Dr. J. B. Maple, secretary of the Sullivan County Medical Society, stating that representatives of the State Welfare Department had met with officials of the Sullivan County Medical Society in regard to a plan for medical care of some 53 children who come under the care of the department at the present time. The Welfare Department desires a complete physical examination for each child with recommendations as to the correction of any diseases and defects. Among the questions asked by the secretary are:

How shall these examinations be made, by the Society as a whole or by any individual doctor?

What is a reasonable fee?

Who shall take care of them afterwards?

Shall this be the family physician of the foster family, or can the Welfare Board say which physician shall take care of them?

Shall this be paid for at regular rates?

The Committee formally went on record that this was an affair of the local county medical society. Copies of Dr. Maple's letter have been sent to Dr. West and Dr. Bauer of the American Medical Association, asking them for any information that they can give us which might be of assistance in facing this situation. The executive secretary reported that he had called upon Miss Louise Griffin, supervisor of child welfare service in Indiana, and talked with her in regard to the situation. She seemed very anxious to cooperate.

The Journal

Further increases indicated in the cost of paper stock. The Committee empowered the secretary and the treasurer to make what adjustments are necessary in order to face this situation.

Malpractice

Findings of the American Bar Association Committee on Professional Ethics and Grievances. This entire matter was turned over to the attorney of the Association who is of the opinion that the Indiana medical defense provisions are not at all in conflict with the findings of the American Bar Association Committee.

FIRST DISTRICT MEDICAL SOCIETY

The annual meeting of the First Councilor District Medical Society was held June seventeenth at the Evansville Country Club.

In the afternoon, golf was enjoyed. The Vanderburgh County Ladies' Auxiliary supplied transportation to the wives of out-of-town physicians.

Dinner was served at 6:30, and was followed by a business meeting.

The scientific program consisted of a panel discussion on syphilis, each talk limited to fifteen minutes.

Ernest O. Nay, M. D., of Terre Haute, talked on "Reasons for Need of Change in Present System of Control of Syphilis."

Dr. F. R. N. Carter, M.D., of South Bend, gave "A Report of a series of Examinations for Syphilis Among Food Handlers."

A. F. Weyerbacher, M.D., of Indianapolis, talked about "Syphilis Control from the Standpoint of the Private Physician."

Judge John W. Spencer, of Evansville, discussed the "Legal Aspects of Syphilis Control."

Minor Miller, M.D., of Evansville, had for his subpect, "Control of Syphilis from the Standpoint of the Health Officers."

FOURTH DISTRICT MEDICAL SOCIETY

The thirty-third annual session of the Fourth District Medical Society was held at the Jennings County Library, North Vernon, Indiana, Wednesday, May twenty-sixth.

The morning was devoted to registration and golf, and at eleven o'clock a business meeting was held. The scientific session opened at 1:30 with an address by the president, Dr. W. H. Stemm, whose subject was "After Many Years." Scientific papers were presented as follows:

Professor D. E. Jackson, of Cincinnati, talked on "Angina Pectoris and Related Symptoms." His talk was illustrated with lantern slides.

Dr. Edgar F. Kiser, of Indianapolis, discussed "Errors in the Diagnosis and Treatment of Diseases of the Heart."

Dr. Matthew Winters, of Indianapolis, had for his subject, "The Control of Contagious Diseases in Children."

Dr. M. Casper, of Louisville, talked on "Elliott Treatment."

Discussionists included Drs. L. H. Osterman, O. A. Turner, C. V. Overpeck, D. L. McAuliffe, Dorothy Teal, E. L. Libbert, W. A. Shuck, and I. A. Whitlatch.

A banquet was served at the country club at six o'clock in the evening, and the after dinner speaker was Dr. Thurman B. Rice, of Indianapolis.

ELEVENTH DISTRICT MEDICAL SOCIETY

The fifty-seventh semi-annual meeting of the Eleventh Indiana Councilor District Medical Association was held at Wabash, May nineteenth, with headquarters at the Armory.

At ten o'clock in the morning a clinic was held at the Wabash County Hospital by Dr. George S. Bond, of Indianapolis. This part of the program was especially well appreciated by those attending.

In the afternoon, business and scientific sessions were held in the Armory, and an attendance of eighty-five members and thirteen guests was recorded.

DeLee's obstetrical films on "Complications of the Second Stage," and "Postpartum Hemorrhage" were shown by Dr. Howard B. Mettel, of the Bureau of Maternal and Child Health of the State Board of Health. "Hemorrhage as a Complication of Pregnancy," was discussed by Dr. H. F. Beckman, of Indianapolis. Dr. Bernard Fantus, of Chicago, gave a practical discussion on the subject of "Useful Prescriptions." Dr. W. R. Hickman, of Logansport, read a timely paper on the subject of "Headaches of Ocular Origin."

During the evening session, Dr. E. D. Clark, president of the Indiana State Medical Association, and Mr. T. A. Hendricks, executive secretary of the Association, told us of

some of the activities of the association, and Dr. R. L. Sensenich, of South Bend, past president of the Association, presented the principal address of the evening on the subject of "Social Aspects of Medicine."

Visiting ladies were well entertained at the Woman's Club where the Catalina Choir of Manchester College provided the program. The Woman's Auxiliary to the Wabash County Medical Society were hostesses for visiting women.

The program committee is indebted to the Committee on Postgraduate Study of the Indiana State Medical Association, and the Bureau of Maternal and Child Health of the Indiana State Board of Health for valuable aid and earnest cooperation in arranging for this program and helping us to put it over.

Officers were elected as follows:

President, R. G. Johnston, M.D., Huntington.

Secretary-treasurer, O. G. Brubaker, M.D., North Manchester.

Necrologist, W. W. Holmes, M.D., Logansport.

Councilor, Ira E. Perry, M.D., North Manchester, elected a year ago for a term of three years beginning January 1, 1937.

The next meeting of the society will be held in Kokomo in October, 1937.

INDIANA STATE BOARD OF HEALTH

BUREAU OF COMMUNICABLE DISEASES

Monthly Report, May, 1937

J. W. Jackson, M.D.

Diseases	*May, 1937*	*April, 1937*	*March, 1937*	*May, 1936*	*May, 1935*
Tuberculosis	223	165	213	181	179
Chickenpox	304	451	446	132	334
Measles	2,677	1,209	172	84	1,086
Scarlet Fever	456	1,030	1,016	525	451
Smallpox	73	55	17	8	3
Typhoid Fever	4	3	3	6	14
Whooping Cough	352	357	283	109	253
Diphtheria	29	37	50	33	66
Influenza	55	473	357	123	46
Pneumonia	49	145	141	104	90
Mumps	199	278	222	314	162
Poliomyelitis	2	2	2	2	0
Encephalitis	0	0	1	0	0
Meningitis	11	18	12	24	13
Septic Sore Throat	1	0	0	0	0
Undulant Fever	1	0	0	0	7
Tetanus	1	0	0	0	0

SOCIETIES AND INSTITUTIONS

LOCAL SOCIETY REPORTS

CASS COUNTY MEDICAL SOCIETY met in Logansport, May 28, for a dinner meeting. Dr. F. M. Gastineau, of Indianapolis, was the principal speaker, his subject being "Some Common Skin Diseases." Attendance numbered eighteen.

* * *

DAVIESS-MARTIN COUNTY MEDICAL SOCIETY held a meeting in Petersburg, May 25. Dr. Herman Baker, of Evansville, was the principal speaker.

* * *

DEARBORN-OHIO COUNTY MEDICAL SOCIETY members met at the King Hotel in Lawrenceburg, June third, to hear Dr. E. Asbury, of Cincinnati, talk on "Intracapsular Fractures of the Femur." Thirteen members attended the meeting.

* * *

DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY members held their annual picnic at the country home of Dr. H. E. Bibler, June fourteenth.

ELKHART COUNTY MEDICAL SOCIETY held its May meeting in the Hotel Elkhart, May thirteenth. This was the last meeting until September. Dr. L. P. Harshman, of Fort Wayne, talked on "Orientations of Psychiatry," and Dr. R. N. Douglas, a dentist, talked on socialized medicine.

* * *

FAYETTE-FRANKLIN COUNTY MEDICAL SOCIETY held a meeting at Brookville, June tenth. Dr. Eslie Asbury, of Cincinnati, presented a paper on the "Injection Treatment of Varicose Veins." Nineteen attended the meeting.

* * *

FLOYD COUNTY MEDICAL SOCIETY held its monthly dinner meeting at New Albany, May fourteenth. J. W. Richardson, head of the Medical and Dental Bureau of Louisville, was the principal speaker.

* * *

FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY met in the Chamber of Commerce Building, Fort Wayne, May eighteenth, for annual meeting and election of officers. An attendance of sixty-seven was recorded. Officers elected are:

Prsident, Dr. E. D. Smith.

Vice-President, Dr. E. H. Kruse.

Secretary, Dr. R. L. Hane.

Treasurer, Dr. E. L. Cartwright.

Dr. M. B. Catlett was made delegate to the state meeting, and Dr. Eugene L. Bulson was named alternate delegate.

* * *

FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY met at Covington, June third, for a dinner meeting. Dr. George Garceau, of Indianapolis, prepared a paper which was read by Dr. Wood on "Fractures of the Elbow." Attendance numbered forty-one. This was the fifteenth annual catfish dinner this society has enjoyed.

* * *

GRANT COUNTY MEDICAL SOCIETY members met at the Spencer Hotel in Marion, May twenty-seventh, for a dinner meeting. Dr. Bert Ellis, of Indianapolis, was the guest speaker, his subject being "Treatment of Diseases of and Fractures of the Nasal Accessory Sinuses."

* * *

HENDRICKS COUNTY MEDICAL SOCIETY held a meeting at Crawley's Hall in Danville, May twenty-seventh. Dr. Bennett Kraft, of Indianapolis, was the principal speaker, his subject being "The Allergic Diseases." Thirteen members attended.

* * *

JASPER-NEWTON COUNTY MEDICAL SOCIETY met at the Hoosier Inn in Rensselaer, May twenty-seventh, for a dinner meeting, with Dr. C. K. Hepburn as host. The guest speaker was Dr. Goethe Link, of Indianapolis, whose subject was "Parathyroid Disease." Fifteen members and six guests attended.

* * *

KOSCIUSKO COUNTY MEDICAL SOCIETY met at the Hotel Hays in Warsaw, June eighth, for a dinner meeting. Case reports and general discussions made up the program.

* * *

LAFAYETTE ACADEMY OF MEDICINE held it regular monthly meeting at Lincoln Lodge in Lafayette, April twenty-seventh. Speakers were Dr. Max Thorek, of Chicago, who presented an illustrated (motion picture) paper on "Electrosurgical Obliteration of the Gallbladder," and Dr. Phil Thorek, of Chicago, who discussed "Diagnosis of Gallbladder Disease." Dr. T. B. Noble, Jr., of Indianapolis, discussed the papers. Attendance numbered sixty-two.

* * *

LAKE COUNTY MEDICAL SOCIETY held its May meeting at the Lake County Tuberculosis Sanitorium, May thirteenth. This was a dinner meeting, and terminated the season's programs. The next meeting will be held in September. Mr. J. D. O'Meara, of Fort Wayne, presented a paper on "The Relationship of Physician and Patient."

* * *

MADISON COUNTY MEDICAL SOCIETY members held their final meeting of the season at St. John's Hospital in Anderson, May seventeenth. An attendance greater than at any meeting within the past two years was recorded. The

guest speaker was Dr. G. L. Kempf, of Indianapolis, who talked about recent discoveries in the treatment of streptococcic infections. The society will resume regular meetings in September.

* * *

MONROE COUNTY MEDICAL SOCIETY met at the Graham Hotel, May twenty-eighth, for a dinner meeting. Guest speakers included Dr. Spencer Gournee, of New York City, and Dr. C. O. McCormick, of Indianapolis. Dr. Ben Ross, of Bloomington, participated in a discussion of "Pelvic Diseases and Obstetrics."

* * *

NORTHEASTERN INDIANA ACADEMY OF MEDICINE met at Kendallville, May twenty-seventh, for a dinner meeting. Dr. James Balch, of Indianapolis, presented the principal address. Forty-five physicians attended the meeting.

* * *

ORANGE COUNTY MEDICAL SOCIETY members met at Orleans, June second, for a dinner meeting and a round-table discussion on the treatment of syphilis.

* * *

PORTER COUNTY MEDICAL SOCIETY held a meeting at Valparaiso, May twenty-fifth. Dr. Robert Hawkins, of Chicago, presented a paper on "Eclampsia, Placenta Previa, Disporportions." A moving picture on "Cataract Operations" also was presented. Attendance numbered seventeen.

* * *

ST. JOSEPH COUNTY MEDICAL SOCIETY members met at Healthwin Hospital, May nineteenth, to hear Dr. Samuel M. Feinberg, of Chicago, speak on "Air-Borne, Non-Pathogenic Fungi—a Newly Recognized Menace to Allergic Individuals."

* * *

TIPPECANOE COUNTY MEDICAL SOCIETY held a meeting at Lincoln Lodge, near Lafayette, May twenty-fifth. Dr. R. H. Young, of Chicago, presented a paper on "The Anemias." An attendance of forty-five was recorded.

* * *

VANDERBURGH COUNTY MEDICAL SOCIETY members met in Evansville, May twenty-fifth, to hear Dr. G. E. Gregstedt, of Chicago, discuss "Modern Concepts of Gastric Ulcer." This was a dinner meeting at St. Mary's Hospital, and the hospital staff acted as hosts to the county society. Attendance numbered eighty-seven.

* * *

WABASH COUNTY MEDICAL SOCIETY members met at the Wabash County Hospital, June second. Dr. W. D. Little, of Indianapolis, was the guest speaker, his subject being "Interesting Intestinal Lesions." Attendance numbered nineteen.

* * *

WAYNE-UNION COUNTY MEDICAL SOCIETY met at the Richmond-Leland Hotel in Richmond, May twenty-seventh, with Dr. C. J. Clark, of Indianapolis, as guest speaker. Dr. Clark presented a paper on "Diagnosis and Treatment in Coronary Artery Disease." Attendance numbered twenty-five.

At the June tenth meeting of the Wayne-Union society, Dr. C. C. Payne, of Dayton, Ohio, spoke on "Physical Defects in School Children," and the paper presented findings from examinations of more than five thousand school children in Dayton during the past ten years. Thirty-five attended this meeting which was held in Liberty, Indiana.

In addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories
- Ampoules Dextrose 50%, 10 cc.
- Ampoules Dextrose 50%, 100 cc.
- Digipoten Tablets 0.05 Gm. (¾ grain).
- Digipoten Tablets 0.1 Gm. (1½ grains).
- Neoarsphenamine with Metaphen-D. R. L.
- Ampoules Procaine Hydrochloride Solution 2%, 1 cc.

Bilhuber-Knoll Corporation
- Metrazol Ampules, 3 cc.

Calco Chemical Co., Inc.
- Sulfanilamide—Calco.
  - Tablets Sulfanilamide—Calco, 5 grains.

Campbell Products, Inc.
- Mercurin.
  - Mercurin Suppositories.

Hoffman-La Roche, Inc.
- Riboflavin Synthetic—Roche.
  - Riboflavin—Roche Ampules, 2 cc.
- Syntropan.
  - Ampuls Syntropan Solution, 0.01 Gm., 1 cc.
  - Tablets Syntropan, 0.05 Gm.

Lederle Laboratories, Inc.
- Sulfanilamide—Lederle.
  - Tablets Sulfanilamide—Lederle, 5 grains.

Merck & Co., Inc.
- Vinethene—Merck.
- Sulfanilamide—Merck.
  - Tablets Sulfanilamide, 5 grains.

National Aniline & Chemical Co., Inc.
- Methylene Blue.

Sharpe & Dohme, Inc.
- Pollen Extracts—Mulford (Complete treatment package containing 2 cc. vial containing 100 pollen units per cubic centimeter and one 10 cc. vial containing 5,000 pollen units per cubic centimeter).

Upsher Smith Co.
- Tincture Digitalis Upsher Smith.
- Tablets Digitalis Upsher Smith 1 grain.
- Tablets Digitalis Upsher Smith 1½ grains.
- Capsules Digitalis Upsher Smith ½ grain.
- Capsules Digitalis Upsher Smith 1 grain.
- Capsules Upsher Smith 1½ grains.

E. R. Squibb & Sons
- Sulfanilamide—Squibb.
  - Tablets Sulfanilamide—Squibb, 5 grains.

Winthrop Chemical Co., Inc.
- Pontocaine Hydrochloride—Winthrop.
  - Pontocaine Hydrochloride Solution 1%.
  - Pontocaine Hydrochloride Solution 2%.

John Wyeth & Brother, Inc.
- Silver Picrate—Wyeth's.
  - Silver Picrate Crystals.
  - Silver Picrate Vaginal Suppositories.
  - Compound Silver Picrate Powder.

Eli Lilly & Company,
- Merthiolate Suppositories 1:1000.

Medical Arts Laboratory,
- Rabies Vaccine (Killed Virus) seven 2 cc. vials package.

National Aniline & Chemical Co., Inc.,
- Scarlet Red Sulphonate—"National."

Schering Corporation,
- Ampoule Solution Neo-Iopax, 10 cc.

Sterisol Ampoule Corporation,
- Sterisol Ampoules Dextrose 2½% in Physiological Solution of Sodium Chloride.
- Sterisol Ampoules Dextrose 10% in Physiological Solution of Sodium Chloride.
- Sterisol Ampoules Dextrose 20% in Physiological Solution of Sodium Chloride.
- Sterisol Ampoules Dextrose 25% in Physiological Solution of Sodium Chloride.
- Sterisol Ampoules Dextrose 5% in Distilled Water.
- Sterisol Ampoules Dextrose 10% in Distilled Water.
- Sterisol Ampoules Dextrose 20% in Distilled Water.
- Sterisol Ampoules Dextrose 25% in Distilled Water.

The following article has been accepted for inclusion in the List of Articles and Brands Accepted by the Council, But Not Described in N. N. R. (New and Non-official Remedies, 1936, p. 471):

Sharp & Dohme,
- Tablets Theobromine with Sodium Salicylate.

BOOKS

BOOKS RECEIVED

INTERNATIONAL CLINICS. Volume II. Forty-seventh series, June, 1937. Edited by Louis Hamman, M.D., visiting physician, Johns Hopkins Hospital, Baltimore, Maryland. Cloth. J. B. Lippincott Co., Philadelphia, 1937.

INFANTILE PARALYSIS AND CEREBRAL DIPLEGIA. Methods Used for the Restoration of Function. By Elizabeth Kenny, with foreword by Herbert J. Wilkinson, professor of anatomy and dean of the faculty of medicine, University of Queensland. 125 pages, profusely illustrated. Cloth. Price 21/—. Published by Angus and Robertson, Limited, 89 Castlereach Street, Sydney, Australia, 1937.

PERSONAL HYGIENE. By C. E. Turner, M. A., Dr. P. H., professor of biology and public health in the Massachusetts Institute of Technology, etc. 335 pages with 84 text illustrations and 3 color plates. Cloth. Price $2.25. The C. V. Mosby Company, St. Louis, 1937.

THE ENDOCRINES IN OBSTETRICS AND GYNECOLOGY. By Raphael Kurzrok, Ph.D., M.D., associate in obstetrics and gynecology, the College of Physicians and Surgeons, Columbia University. 488 pages, illustrated. Cloth. Price $7.50. The Williams and Wilkins Company, Baltimore, 1937.

CLINICAL REVIEWS OF THE PITTSBURGH DIAGNOSTIC CLINIC. Guideposts to medical diagnosis and treatment. Edited by H. M. Margolis, B.S., M.D., F.A.C.P. Contributors: H. M. Margolis, M.D., H. G. Schleiter, M.D., C. H. Marcy, M.D., C. C. Mechling, M.D., R. R. Snowden, M.D., L. G. Criep, M.D., G. W. Grier, M.D., H. A. Anderson, D.D.S. Cloth. 552 pages. Price $5.50. Paul B. Hoeber, Inc., New York, 1937.

BOOKS REVIEWED

TEXTBOOK OF MEDICINE. By Charles P. Emerson, M. D., research professor of medicine, Indiana University. 1296 pages. Cloth. Price $8.00. J. B. Lippincott Company, Philadelphia and London, 1936.

Dr. Charles P. Emerson's textbook of medicine is particularly attractive. It completely covers the theory and practice of medicine, and everything that he states can be confirmed. The book is different than the older texts on theory and practice of medicine. It is divided into twenty well classified parts, each prefaced by accepted and concise physiology, some from the research laboratory, some from the classroom. This enables the student to reason and theorize the symptoms which are an expression of morbid physiology rather than morbid anatomy. Old medicine conceived only of pathology in the etiology of symptoms.

This book expresses the wide versatility in medicine of its author. Modern medicine is outlined, rather than the antiquated therapy with drugs popularized by drug manufacturers.

Dr. Emerson's splendid book would be a helpful addition to any physician's library.

ABSTRACTS

PROFESSIONAL FREEDOM AND SOCIAL RESPONSIBILITY

CHARLES GORDON HEYD, New York (*Journal A. M. A.*, June 12, 1937), points out that from remote times the doctor has enjoyed complete professional freedom and has thereby assumed great social responsibility. Through the centuries, fundamental discoveries made by practicing physicians have changed the whole current of life. These discoveries were made by physicians without any monetary remuneration or any expectation of personal advantage. These significant contributions have made possible a lessening of disease, increased longevity and incalculable relief from suffering. Humanity has benefited probably more from the contributions of physicians than it has through the mastery of man's environment by the discoveries in the physical sciences. Humanity has benefited in a social sense more by the work of physicians than it has by inventions in government. Largely by reason of the profession's individualism and the fact that it explored and developed a virgin continent with the spirit of the pioneer, the United States has had a better health record than obtains anywhere else in the world. The final analysis of the social intelligence of a people will rest on their health program. There are certain portions of the United States in which it is impossible under present conditions to provide any fair degree of medical service. A single example will suffice: Until the diet of certain groups of people has been brought up to a vitamin maintenance level by increasing their earning capacity and by education, it would be foolish to talk about adequate medical and dental services. What a fallacy! To assume that all the people at all times, under all conditions, can receive what is so glibly spoken of as "adequate medical service" or even as the "best of medical care." What a flight from reality to suppose that the profession can make any effective inroads on the recalcitrance of human nature when there are 16,000 chiropractors, 7,600 osteopaths, 2,500 naturopaths and 10,000 Christian science healers taking $125,000,000 a year from the American people for unscientific or one-track systems of healing. America is confronted with the following social conditions: increase in population, a tremendous increase in the number of highly educated citizens, an increasing mechanization of life with urban condensation, a shift from the agrarian to the industrial form of life, gigantism in industry and hospitalization, a change in the concept of government and finally the political power of masses. Increased morbidity, with more hospital days, is the inevitable consequence of assuming a compulsory health insurance scheme. It is impossible to set up any state system of medicine or compulsory health insurance without creating a class of bureaucrats whose self interest maintains them in office. These possess the poisonous virus of all bureaucracies—an insatiable desire for increased power. There is today a large bulk of scientific medical measures that must wait until the level of intelligence of the people is prepared to accept them. As indicating the tremendous gap between scientific accomplishment and its clinical application, one may recall that there were "not half a dozen clinical thermometers employed in the largest Union army throughout the Civil War"; yet this was 250 years after the discovery of a means of recording changes in temperature. The quality of medical services depends on medical education. Conspicuous in the advancement of medical standards has been the Council on Medical Education and Hospitals of the American Medical Association, which began in 1905. It has led in the development of a public sentiment for the eradication of the proprietary and incompetent medical schools and an increase in pre-medical education. The quality of all social services rests primarily on character, and the relationship of the doctor to the community is based on the ethics of the medical profession. Critics of medical organization sardonically suggest that the Code of Ethics is to protect the so-called vested rights of the physician in sickness. Nothing is more erroneous. The Code of Ethics is for the protection and benefit of the public. One may hopefully anticipate that in

this country there shall emerge a progressively advancing type of medical education and medical services which may be called the American system. The science of medicine and the art of medical practice must retain its freedom and professional liberty. The medical profession "does not rely on endowment but on its own exertions directed to meeting human wants. There is no great profession which has so little to say to the public purse and which so moderately and modestly dips its hand into that purse. It is not only in the interest of the public, but of the profession itself, that it is eminently self supporting. The principle of self support does much to maintain its honor and independence, and to enable it to pursue its stately march in the times that have come and in the times that are coming, to form its own convictions, to act upon its own principles without fear or favor, for the general benefit of mankind."

TWO CASES OF STREPTOCOCCIC MENINGITIS TREATED SUCCESSFULLY WITH SULFANILAMIDE AND PRONTOSIL

MAX H. WEINBERG, RALPH R. MELLON and LAURENCE E. SHINN, Pittsburgh (*Journal A. M. A.*, June 5, 1937), used sulfanilamide and prontosil in two cases of streptococcic meningitis. They also studied its effects in comparison with that of a new type of serum treatment which has been used successfully by them for nearly a decade. Of the two cases, the second is the one that merits the greater attention. The patient was practically moribund when she was admitted. From both the clinical and the bacteriologic standpoint, the patient appeared to be doomed. The child had marked bulbar involvement, and the dysphagia was almost complete. There is no reasonable doubt that a noteworthy bacteriostatic and probably a bactericidal effect of the spinal fluid is present. It is particularly clear cut in the second case, in which no growth of streptococci occurred after treatment, despite the fact that ten times the original inoculation was employed. The relative sparsity of streptococci present in the smears supported this observation. It was found that when 125 of the patient's streptococci were incubated in the patient's fresh spinal fluid about half of them refused to grow after eight hours' incubation of the fluid at 37° C. After twenty-four hours none grew. Of the ultimate fate of these inhibited or killed organisms in the human being, little is known. The question of dosage and method of administration cannot be answered definitely as yet. Sulfanilamide does not seem to be toxic, so it is rather safe to use. Attempts at standardization of dosage are already being made. The authors have given normal individuals as much as 4 Gm. a day and their type III pneumonia patients who have shown a remarkable response (about 75 per cent recovery) have often received as much and sometimes more, daily. When swallowing is difficult, the drug should be given intramuscularly. They have overcome the difficulty of the patient's inability to swallow the tablet by administering the drug by rectum. Therapy should be started immediately. The bacteriostatic observations of the English workers estimate that it takes at least forty-eight hours before such effects can be obtained in the serum; and because of this the treatment should be instituted promptly. In their second case the authors started the treatment in one hour and twenty minutes, the time that it took to complete the neurologic examination, the lumbar puncture and the microscopic examination of the fluid after the admission of the patient to the hospital.

INTRA-UTERINE RESPIRATORY MOVEMENTS OF THE HUMAN FETUS

FRANKLIN F. SNYDER and MORRIS ROSENFELD, Baltimore (*Journal A. M. A.*, June 5, 1937), point out that respiration is not initiated in the child at birth, but extends far back into embryonic life. Instead of a state of complete apnea during intra-uterine life, the human fetus shows spontaneous respiratory movements for periods lasting many minutes. The capacity of the human fetus to show respiratory movements within the uterus for brief intervals was recognized by Schultze. Respiratory failure of the new-born, or asphyxia

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ABSTRACTS

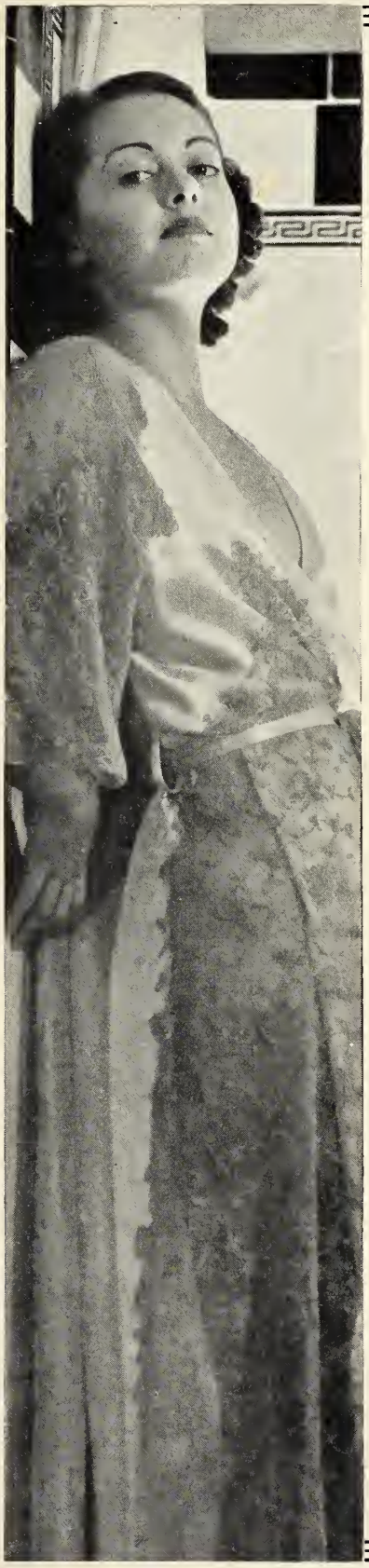
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neonatorum, must be regarded as a suppression of previous activity rather than failure of some new mechanism to begin functioning at birth. In the apneic new-born child the question is not what causes the first breath but rather what factors have been superimposed to suppress the continuation of respiratory movements. With regard to the causes of respiratory failure, it may be emphasized that the fetal respiratory system before birth has been demonstrated to have a peculiar sensitivity to the depressant effect of anoxemia and narcosis. Both of these factors belong to the period preceding delivery. To deal with them at that time by efforts to maintain adequate oxygenation, and caution in the choice and use of anesthetic agents would be more effective than later attempts at resuscitation. The aspiration of amniotic fluid is not an accidental complication of labor, but must be viewed as a normal consequence of fetal respiration. The normal development of the alveoli may be complicated by the presence of amniotic fluid containing debris of excessive amount or abnormal type. A mechanical obstruction of bronchioles brought about during embryonic life may interfere with the normal flow into the lung of amniotic fluid and result in incomplete dilatation of alveoli; i. e., atelectasis. Certain types of debris such as cells, meconium and sebaceous matter may be injurious not only as foreign bodies but also as chemical irritants. In view of the rapid exchange of fluid between the pulmonary alveoli and the amniotic sac, bacterial contamination exposes the alveoli to immediate invasion by a current of infected fluid. The pathogenesis of intra-uterine pneumonia may be clearly reconstructed in many cases as a complication of normal intra-uterine respiration.

COOPERATIVE CLINICAL STUDIES IN TREATMENT OF SYPHILIS: EFFECT OF SPECIFIC THERAPY ON PROPHYLAXIS AND PROGRESS OF CARDIOVASCULAR SYPHILIS

HAROLD N. COLE, Cleveland (*Journal A. M. A.*, May 29, 1937), with LIDA J. USILTON, Washington D. C.; JOSEPH EARLE MOORE, Baltimore; PAUL A. O'LEARY, Rochester, Minnesota; JOHN H. STOKES, Philadelphia; UDO J. WILE, Ann Arbor, Michigan; THOMAS PARRAN, JR., Albany, New York, and JOHN MCMULLEN, Washington, D. C., state that it has been estimated that in the United States annually one-half million people with late syphilis seek treatment for the first time, about 50,000 of whom have a detectable cardiovascular syphilis. Among 6,253 patients admitted with latent or late syphilis (principally central nervous system or cardiovascular) who were treated for six months or longer, there were 9.9 per cent who on admission manifested or subsequently developed cardiovascular syphilis. There were 4.9 per cent of cases of uncomplicated syphilitic aortitis, 4.1 per cent of aortic regurgitation, 1.2 per cent of aneurysm and 0.8 per cent of myocarditis. Proportionately three times as many Negroes as white patients were affected, and among the males four times as many. In 7 per cent of the patients with cardiovascular syphilis, involvement occurred within five years after infection, but the largest group in ten to twenty years or twenty to thirty years after infection. The blood serologic reaction was positive in 79 per cent of the cases. Among those patients on whom a spinal fluid examination was done, definite abnormalities were detected in 56 per cent. In 3,641 cases in which treatment was administered in the early stages of syphilis, less than 1 per cent developed cardiovascular involvement. However, since 71 per cent have been followed for less than three years, there is a strong probability that in certain of these cases cardiovascular syphilis will be detected as the observation period is extended. Of 935 patients followed for from three to ten years, fifteen, or 1.6 per cent, developed cardiovascular syphilis, and among 105 patients followed for from ten to twenty years, seven, or 6.7 per cent, developed cardiovascular syphilis. Of the patients followed for from three to twenty years, none developed aortic regurgitation or aneurysm provided they had been adequately and regularly treated during the early stage of syphilis. Of the entire Cooperative Clinical Group material 69 per cent had never had

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ABSTRACTS

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any specific treatment previous to detection of the cardiovascular syphilis. When thirteen or more injections of an arsenical with twenty or more injections of a heavy metal were given after the detection of the cardiovascular involvement, it appeared that not only was there some symptomatic relief of cardiovascular symptoms, but also that there was a prolongation of life, the extent of which was dependent on the severity of cardiovascular involvement when antisyphilitic treatment was begun. The best treatment of cardiovascular syphilis is prophylaxis, i. e., at least twenty to thirty injections of an arsenical with interim heavy metal (bismuth) administered under the continuous system while the patient is in the early stages of syphilis. Once the patient has cardiovascular syphilis, in addition to symptomatic care, preferable treatment seems to consist of a preliminary course of intramuscular bismuth injections and potassium iodide by mouth. followed by the cautious use of arsenicals. Shock must be avoided at all times. If the therapy is well tolerated, alternating courses of the heavy metals and the arsenicals may be cautiously continued.

PROTAMINE INSULIN VERSUS ORDINARY INSULIN

ANTHONY SINDONI, JR., Philadelphia (*Journal A. M. A.*, April 17, 1937), believes that since protamine insulin is inadequate to oxidize the rapidly absorbed dextrose of the meal, it should not be prescribed alone, but only as an aid to ordinary insulin. Together they form an ideal insulin therapy in diabetic patients requiring large doses of ordinary insulin. Protamine insulin, if indicated, should be given on retiring and if necessary after breakfast, immediately following the ordinary insulin, which is given within from fifteen to twenty minutes after meals. Between meals the dextrose of the meal that escaped oxidation of the ordinary insulin may be oxidized by the slow, continuous action of the protamine insuline. This combined form of insulin therapy approaches more nearly the natural insulin secretion and action in oxidizing the increased blood sugar caused by the absorption of the carbohydrate of the meal than probably any single insulin preparation so far advocated. This combined insulin therapy is advocated in any type of diabetes requiring large doses of ordinary insulin, preoperative and postoperative cases, acidosis and coma cases, patients with marked fluctuations of blood sugars, elderly diabetic patients with advanced sclerosis of the cardiovascular system, and cases complicated with infections. Fasting blood sugar estimation (before breakfast) alone, as practiced by the majority of physicians, is no complete reliable index to the progress of the patient's diabetic condition or oxidizing power of carbohydrate. A blood sugar estimation two hours after meals gives a better index. It is advisable, therefore, in order to obtain a better index to the patient's oxidizing power of carbohydrate, as well as his progress, to obtain a fasting blood sugar estimation as well as one after meals, i. e., a two-hour interval. With the combined insulin therapy much will be accomplished; i. e., a better and more complete oxidation of the hyperglycemia of the food resulting in nearer to normal sugar curve after meals, a smaller likelihood of disturbances of cholesterol metabolism, a better glycogen storage in liver and muscles and, hence, an improvement in their rhythmic function. This will result in a better metabolic equilibrium and, in all probability, help in further delaying the period of inception of premature arteriosclerosis. Patients should be hospitalized before attempting the use of protamine insulin in order to test their reaction and susceptibility to the compound. If a diabetic patient is responding favorably with small doses of ordinary insulin after meals that maintain a blood sugar that is within the normal level two hours after meals, it is not advisable to use protamine insulin.

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ADVANCEMENT OF MEDICAL EDUCATION: A. M. A. PRESIDENT'S ADDRESS

J. H. J. UPHAM, Columbus, Ohio (*Journal A. M. A.*, June 12, 1937), compares medical knowledge of forty years ago with that of today. Then there was no knowledge of insect-borne diseases, food deficiency diseases—except perhaps scurvy—vitamins, endocrines, hormones, insulin, virus diseases, the electrocardiograms, allergy, serology, standardized drugs and other innumerable improvements of modern therapy. These are the harvest of the last forty years. The average modern mdical student tries to acquire them in four hectic years of forced mental feeding. The graduate of ten or twenty years ago has had to add to his basic information as much as he acquired in his college course, if not more. Legally when he receives his license to practice, he is a finished product; actually he has just made a fair start in his educational life. His future progress under present conditions is a matter entirely of his desire for self improvement and personal initiative, stimulated by ambition or financial self interest. There are four main procedures by which postgraduate self education is attainable. First by personal experience and clinical observation. This should be the habit of every physician as an underlying part of his program. Second, training in postgraduate colleges. This is mainly directed toward the development of education in the various specialties and, while excellent, affects only a relatively small percentage of physicians. Third, through medical publications. The existence of so many publications is definitely a response to the widespread demand for the latest medical information. Fourth, through medical society meetings. For centuries it has been the habit of physicians to assemble from time to time to discuss mutual problems, relate experiences of medical practice and announce new discoverics. Ninety years ago the American Medical Association was founded to organize the medical profession on a national basis, correlate the activities of the constituent societies, and present at its annual meeting the latest developments of medical progress. The Council on Medical Education and Hospitals in the last thirty years has done a monumental service to medical education and the public. In its first inspection and grading of medical college, it did much to remedy a situation that was a reproach and indeed a scandal to the name of medical education. In its second inspection of the last two years, it has carried on that work in logical sequence and further advanced the standards of colleges so that they compare favorably with any in the world. In its inspection of hospitals and the institution of standards for intern training it has initiated a definite program for providing the public with thoroughly qualified practitioners. This council has no legal status or statutory power of enforcement, but by support of medical opinion and the publicity given its reports in *The Journal of the American Medical Association*, it was able to reduce the number of 186 medical colleges, some good, many bad and the remainder indifferent, to seventy-five of acceptable quality. Much the same result has been apparent in the cager efforts of hospitals to meet the standards of an "approved" hospital. Such a response is a tribute to its wise judgment and a recognition of its authority. Lest, therefore, there arise a demand from without the ranks for an "approved practitioner," thc American Medical Association should of its own initiative study the present situation and take measures to forestall such an eventuality. It is evidcnt from the number of medical society meetings at present being held, the excellent attendance reported generally and the great number of medical publications supported by members, that the majority of the medical profession of this country is alive to the need of continued education and is seeking voluntarily to take advantage of the opportunities presented. It must be admitted, however, that a small percentage does not attend medical meetings and does little to keep up with medical progress. The good name of the profession suffers from such an attitude of even a relatively small group, and here lies a challenge to the organization. Isolation and the lack of accessibility of meeting places are often valid excuses for much of this nonattendance. To meet this, a comprehensive study of the traveling postgraduate courses is urged, already in operation in some states, with the idea of a more general and systematized development of such a plan. From an ex-

(Continued on page xxviii)

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tensive acquaintanceship with practitioners, the author is confident that, if such educational opportunities were thus made available at accessible points, the response would be prompt and encouraging. In all meetings, whether of the suggested traveling postgraduate or the regular county, state or national societies, more definite consideration should be given to the majority of the attending audience in arranging programs and in the method of presentation to the end that the programs may be more attractive and that the greatest good may be gained by the greatest number. In this the American Medical Association may assume a scheme of leadership and guidance that will demonstrate that it has a definite plan of medical education not only for the undergraduate and the intern but also for all its members throughout their entire period of medical life expectancy. With such a scheme of activity in these days of medical and economic unrest, medical conscience may be reassured and all may take hope that American medicine will show to the world the highest standards of medical science and medical practice.

DECISIONS OF ADVISORY COMMITTEE ON ADVERTISING OF COSMETICS AND SOAPS

The following general decision of the Advisory Committee on Advertising of Cosmetics and Soaps have been released for publication:

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2. Such products as "skin fresheners" and "tissue creams" are not acceptable for advertising, because there is no evidence that tissue can be nourished or skin freshened by cosmetic preparations.

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4. The composition of all cosmetics must be openly declared, either on the label or in literature which may be obtained on request from the manufacturer. In addition, the manufacturer must agree to furnish to any physician who makes inquiry the names of the dyes and their chemical composition and the names of the perfumes used in any of the cosmetic preparations.

5. The statement "Accepted for Advertising in Publications of the American Medical Association" may not be used in connection with a firm's product unless all the products referred to in the display or advertisement are acceptable for advertising. If all the products are not acceptable, then the firm must name the products which are acceptable for advertising.—*Jour. A. M. A.*, June 12, 1937.

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[1] Because this term was in general use before the creation of the Advisory Committee on Advertising of Cosmetics and Soaps, the following action has been adopted by the Advertising Committee of THE JOURNAL:

"Beginning with July 1, 1937, the term 'nonallergic' shall not appear in the name or description of any cosmetic preparation unless an asterisk appears opposite the word 'nonallergic' accompanied by a suitable notation explaining the limitations of the term.

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UROLOGICAL COMPLICATIONS DURING PREGNANCY*

GEORGE C. PRATHER, M.D.†

Boston

URINARY TRACT CHANGES IN NORMAL PREGNANCY

The changes which occur in the urinary tract during pregnancy have been studied in several ways. Early observations described gross specimens obtained at autopsy. Later, the histological appearance of the kidneys, ureters, and ureteral sheath was described. These findings have now been supplemented by those obtained by cystoscopy, intravenous and retrograde pyelography. Recently Baird,[1] Traut and McLane[2] have studied ureteral physiology by utilizing the principles of the Trattner hydrophorograph with which the peristaltic activity is recorded.

Although the typical changes are well recognized, the complete answer as to their cause can not be given. Numerous hormonal activities are undoubtedly present during the period of gestation; probably one or more of these exert some influence on the urinary tract.

Additional evidence for the hormonal theory has recently been produced by Rossi[3] who, using a concentrate from the blood serum of pregnant rabbits, has produced the characertistic ureteral and pelvic dilatation in non-pregnant rabbits. Injection of this type of concentrated blood serum produces ureteral changes within forty-eight hours, and the effect of the injection remains for a period of days. Rossi's observations were made in rabbits with intravenous pyelograms. While the changes that one can observe in the prints of the paper are not striking, they are sufficient to merit confirmation, and certainly substantiate the theory of hormonal influence. The chemical nature or solubility of this hormone has not been described. Future observations and studies similar to those of Rossi are sure to create interest. In addition to the hormonal factor which he is studying, a mechanical factor caused by the enlarging uterus also appears to exert an important influence on the hydraulics of the upper urinary tract.

We also find it difficult to explain at times the wide variations in a socalled normal pregnancy. In a study of a large number of patients, the findings in a few seem to be definite exceptions from the majority. Why these variations occur remains somewhat of a puzzle. However, we shall consider briefly the more typical changes.

By dividing the nine months of pregnancy into trimesters, we may obtain a better idea of the progressive changes in the urinary tract.

During the second and third months of the first trimester, the trigone of the bladder is slightly elevated, and some pressure is noticeable on the posterior bladder wall. Normal ureteral peristalsis may become modified and frequently a slight degree of dilatation may be noted throughout the whole ureter and the renal pelvis. More than a slight dilatation during this period would be indicative of pre-existing pathology. Since the change occurs before the uterus is large enough to exert pressure on the pelvic portion of the ureters, these observations cannot be explained on a mechanical basis. Hormonal activity is probably responsible for this slight degree of atony.

During the second trimester, or the fourth, fifth and sixth months of pregnancy, it is believed that the hormonal influence continues. Traut, McLane and Kuder[4] have recorded a high proportion of patients with diminished ureteral peristalsis. The ureteral sheath which is found surrounding the lower part of the pelvic portion of the ureter undergoes a marked hypertrophy. Hofbauer[5] first described this change in 1928, believing it to be the cause of the upper urinary tract dilatation. Baird, in a careful study of gross and histological specimens, confirmed Hofbauer's observations regarding the presence of this hypertrophic condition, but states that it is not responsible for the dilatation of the upper ureter. We believe that if Hofbauer's contention were correct, the ureteral

* Presented at the meeting of the Eighth District Medical Society in Anderson, May 5, 1937.

† From the Urological Service of the Boston Lying-In Hospital.

[1] Baird, Dugald: *J. Obst. & Gyn. Brit. Emp.*, 1935:42:733.

[2] Traut, H. F., and McLane, C. M.: *S. G. & O.*, 1936:62:65.

[3] Rossi, V.: *Arch. Ital. di Urol.*, 1936:March:232.

[4] Traut, H. F.; McLane, C. M., and Kuder, A.: *S. G. & O.*, 1937:64:51.

[5] Hofbauer, J. H.: *Bull. Johns Hopkins Hosp.*, 1928:62:118.

dilatation should continue down to the hypertrophic area instead of stopping as it does at the brim of the bony pelvis. The uterus at this period is large enough to produce mechanical pressure on the pelvic portion of the ureter at the level of the pelvic brim. (Fig. 1.)



Figure 1. Seventh month normal pregnancy—negative urine.

In the beginning of the third trimester of pregnancy, one usually finds the maximum degree of change in the upper urinary tract. By pyelographic studies, Schumacher found dilatation in all of 100 patients whom he studied. From observations on eighty-four autopsy cases, Baird found dilatation of the right urinary tract in 85 per cent and of the left in 72 per cent. We rarely find a patient who does not show some dilatation of the renal pelvis or ureter on one or both sides. There is unanimous opinion that the right ureter and pelvis shows this change more frequently than the left irrespective of the position of the fetus in the uterus. The dilatation and coexisting kinking of the upper ureter terminates in a tapering or funnel-shaped manner at the pelvic brim. The right common iliac vessels by crossing the vertebral column are more exposed than the left, so that the right ureter as it crosses at the bifurcation of the right common iliac artery is more exposed to pressure from a pelvic mass. Dextro rotation of the uterus with greater pressure on the right ureter has also been given as a cause of the more frequent hydroureter on the right side.

Traut et al. in a composite graph of the observations in 14 normal women found that the low point of ureteral motility occurred during the sixth and seventh months of pregnancy. They find evidence of a return toward normal ureteral activity during the last two months of pregnancy which is accompanied by a "moderate decrease in the dimensions of the tract."

Histological studies of the dilated portion of the ureter by Baird demonstrate that the "wall is thinned out and there is no appreciable hypertrophy or hyperplasia of fibres which suggest that the contractile power of the ureter has been diminished." The histological appearances suggest stretching of "an atonic structure rather than the breakdown of a compensatory hypertrophy."

Cystoscopic observations of the ureteral orifices during pregnancy tend to confirm the idea of atonicity. Very feeble spurts of urine with only minor contractions of the ureteral orifices can often be noted. At times it has seemed to me that a slight but continuous ooze of urine occurred. The intervals between contractions are prolonged so that one may focus attention continuously on the ureteral orifice for several minutes and see no definite contraction of it. Pyelograms following these observations have invariably shown an appreciable degree of dilatation and kinking of the upper ureter. Chromocystoscopy and delay in the excretion of intravenous pyelographic media have led Baird to believe that stasis occurs in the right ureter in the majority of primipara and in almost 50 per cent of the multipara.

We can easily realize, therefore, that pregnancy does have a profound influence on the normal urinary tract.

Temporary hydroureters (upper two-thirds) and hydronephroses are produced either on one or both sides probably as the result of hormonal activity producing atonicity of the ureters and renal pelvis which is accentuated by the mechanical obstruction of an enlarged uterus.

It would be difficult to explain the change on a pure hormonal theory. (Fig. 2.) Why should the lower ureters be exempt from such an influence? Why should the upper right ureter be affected more commonly and to a greater extent than the left ureter? Likewise it is not easy to explain the condition on a purely mechanical basis. Often disturbed ureteral motility and some dilatation are in evidence before the uterus is large enough to be a factor. Histological section does not indicate muscular response to an obstruction.

Whatever the ultimate answer to the cause of this change, we can all agree that urological pathology of an infectious or metabolic nature which occurs under these circumstances may at times require treatment somewhat different from a similar situation in the non-pregnant.[6]

[6] Crabtree, E. G., and Prather, G. C.: *Jour. Urol.*, 1932:26:1.

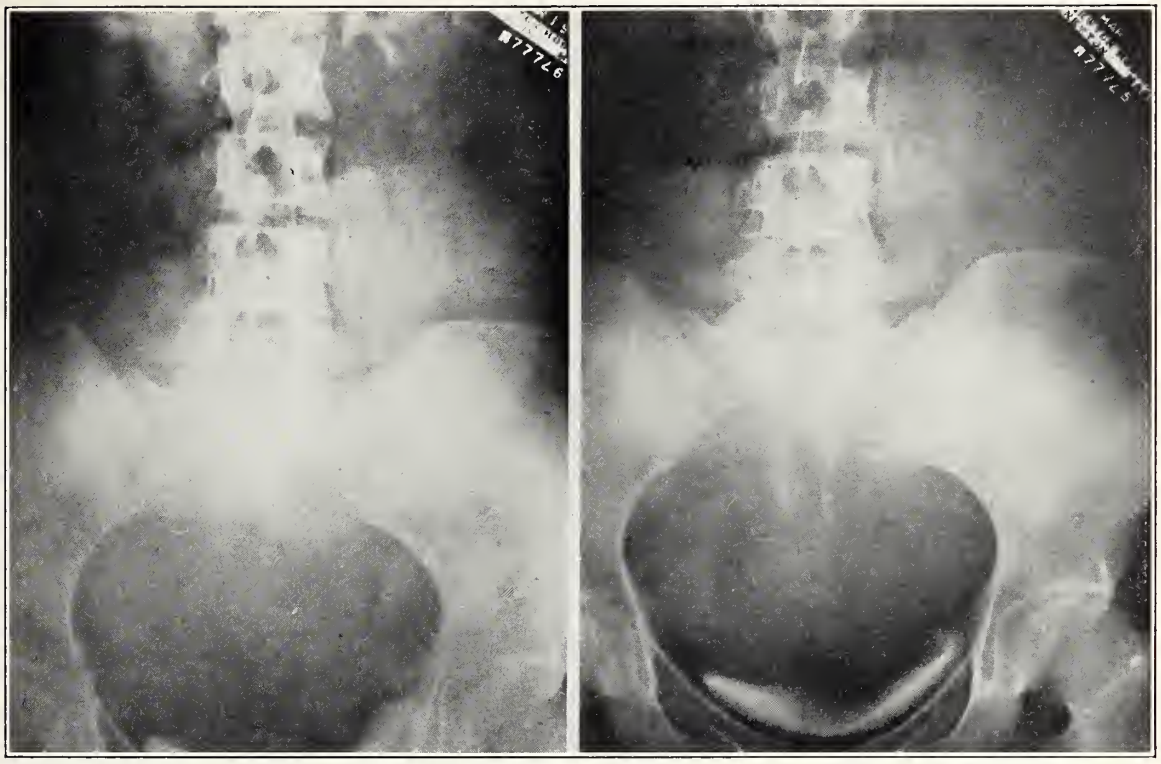


Figure 2. Intravenous pyelogram. Tremendous fibroid tumor of uterus producing right hydronephrosis and hydroureter similar to those found in pregnancy.

RETROGRESSIVE CHANGES AFTER A NORMAL PREGNANCY

Anatomical and physiological changes of a retrogressive nature begin very soon after delivery. Stasis in the ureters and pelves is decreased immediately although Traut has found increased atony of the ureteral wall during the first fourteen days of the postpartum period. This decrease in stasis is therefore presumably due to absence of a mechanical factor. Baird has found that pyelographic media are excreted much more rapidly during this period than in the latter part of pregnancy. After a two weeks' period, ureteral tone shows signs of returning and according to Traut's work, reaches a normal value in about eight weeks. Some observers have reported that pyelograms show a very prompt return to a prepregnant status. We believe, however, that pyelographic evidence of the recent pregnancy can often be demonstrated during the first three months of the postpartum period. In certain instances, pyelographic evidence of the pregnancy remains in an attenuated form for a period of years. It is very difficult to estimate the probable amount of retrogressive change in the renal pelvis, calyces, and ureters, until a four months period has passed. Unless an emergency arises which necessitates urological surgery, radical measures should, therefore, be delayed during that period.

After a period of four months it is unlikely that further retrogressive changes will take place, unless influenced surgically or cystoscopically.

The indications for renal or ureteral surgery can be determined at the end of this period with some degree of precision.

URINARY TRACT INFECTIONS

The most common urological complication observed during and following pregnancy has been urinary tract infection. Acute pyelitis or pyelonephritis at the Boston Lying-In Hospital shows an incidence of 3.3 per cent in 11,687 hospital deliveries. The condition occurs more commonly in primipara than in multipara. We find the majority of cases between the fifth and seventh months of pregnancy.

Seldom does one have opportunity for pathological examination of the kidneys, for with proper treatment, the condition is rarely fatal. It is, therefore, difficult to say what proportion shows cortical changes. We can, perhaps, judge to some extent by the severity of the febrile and systemic reaction, by the urine findings, and by renal function tests but these are not as convincing as a histological study might be.

I shall not dwell on the modes of infection. There is experimental evidence to indicate that it is possible for renal infections to occur either via the blood stream, or as an ascending infection either by way of the lumen of the ureter or through lymphatics in or adjacent to the ureteral wall. The clinical history and findings in cases on the wards will point toward a blood-borne infection

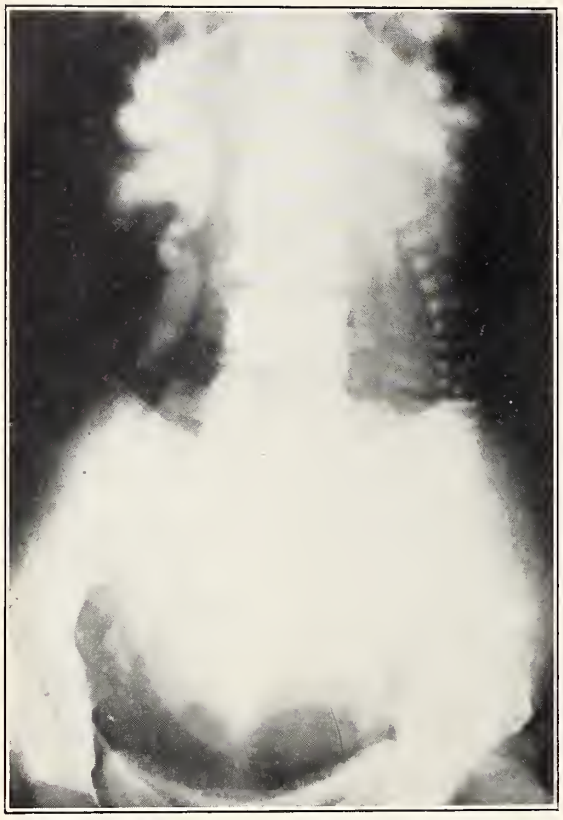


Figure 3. D.E. Pyelitis, sixth month of pregnancy. Intravenous pyelogram. Relieved by medieal treatment.



Figure 4. E.K. Eighth month of pregnancy. Mild pyelitis.

in one and an ascending type in another. We cannot make a dogmatic statement regarding mode of infection.

The most common bacteria found in the urine are motile bacilli of the B. coli groups. These are present in over 90 per cent. Staphylococci have not been found frequently.

Symptoms may be severe, beginning with a chill, a rise in temperature to 101° or as much as 104° F., nausea, vomiting, pain in the kidney region, and frequency of urination. A milder infection might cause only a slight chill, a moderate elevation of temperature, some pain and tenderness in the kidney areas, and no urinary symptoms.

The right kidney gives symptoms more frequently than the left. At times pain is worse in the right flank or right mid-abdomen and may simulate pain due to appendicitis.

Physical examination finds a patient who appears ill, usually dehydrated, with a rapid pulse and with tenderness in the costo-vertebral angle. There is frequently tenderness over the right side of the abdomen lateral to the uterus. The leukocyte blood count will average between 15,000 and 18,000. A catheter specimen of urine which has been centrifuged must be examined for bacteria as well as cellular content. At the onset of an acute urinary infection, bacteria but no leukocytes are the rule. Within forty-eight hours, however, leukocytes will appear and be present in increasing numbers during the following days. (Figs. 3-4.)

The diagnosis of a typical case is not difficult. There are times, however, when the character and distribution of the pain and tenderness, temperature of 100.8° to 101.4° F., with no leukocytes in the urine, raise the question of intra-abdominal pathology. Patients with right flank pain and no or very slight fever may also raise the question, whether the pain is of kidney origin or is due to pathology in the abdomen. Especially when the question of appendicitis or some other surgical condition of the abdomen is in point, a definite opinion is needed as to whether the pain is of renal origin or not.

Cystoscopy is of definite value in such a problem. If the pain is of renal origin, ureteral catheterization and removal of urine from the renal pelvis by suction will immediately relieve the pain. X-ray and pyelographic examination are supplementary aids but with some ureteral and pelvic dilatation even in a normal pregnancy, they are less diagnostic than the relief or lack of relief of pain by draining the urine from the kidney. For this reason, intravenous pyelography would not be an aid when faced with such a problem. The patient should be cystoscoped without preliminary medication in order that any change in pain may be credited to the right agent. In this situation,

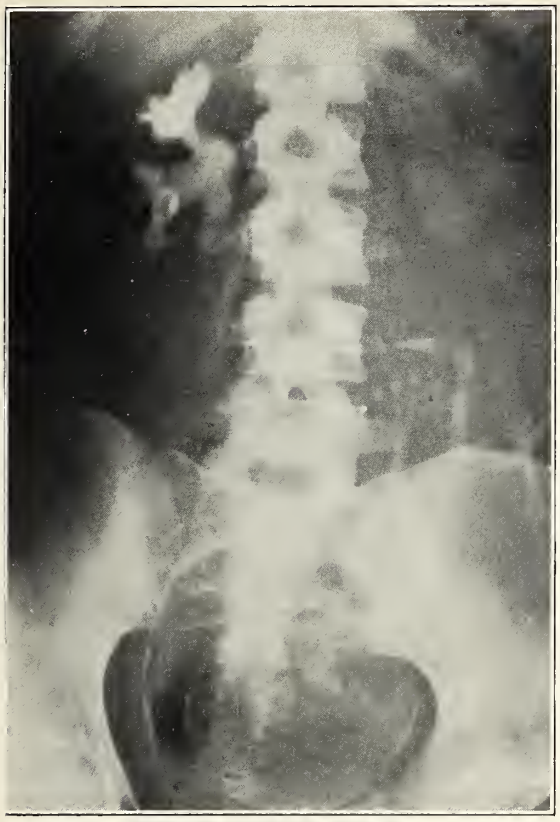


Figure 5. M.S. Sixth month of pregnancy; right twisted ovarian cyst, right pyelogram. The cyst is visible on the original x-ray film.

pyelograms should not be bilateral, so that if the pain is not relieved by ureteral catheterization and abdominal exploration is indicated, anesthesia may be given without fear of urinary suppression. This diagnostic procedure has enabled me to diagnose two cases of twisted ovarian cysts during pregnancy (Fig. 5) in which the pain was suspected of being renal in origin.

When a diagnosis of pyelitis is established, a regime of rest, forced fluids, and mild alkalies is instituted. If the patient has difficulty taking over 100 ounces of fluid by mouth in a period of 24 hours, clyses of saline solution or intravenous dextrose are given. We endeavor to have a fluid intake of 150 ounces a day. This form of treatment will often be effective in reducing the fever and relieving other symptoms. It will seldom, however, produce a sterile urine during pregnancy. If the fever does not subside following a five to seven days' period of this medical treatment, cystoscopic treatment is instituted.

The rationale of cystoscopic treatment is, of course, based on the fact that in pyelitis of pregnancy we are really dealing with an infected hydronephrosis. There is a reservoir of infected urine in the kidney which is not being eliminated promptly. Ureteral catheterization, drainage of the infected urine, lavage of the renal pelvis, aid

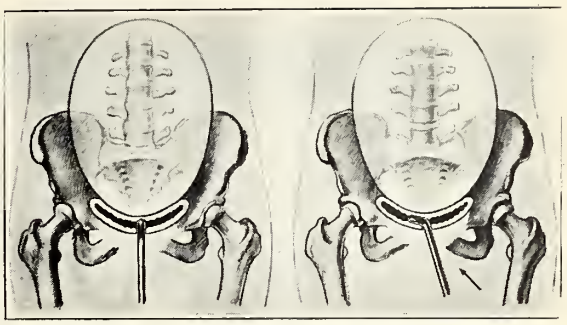


Figure 6. Left: Usual method of insertion of cystoscope will cause pain due to contact with posterior bladder wall and lower uterine segment. Right: Oblique insertion (direction of arrow) of cystoscope facilitates bladder inspection and ureteral catheterization.

in improving this condition. This form of treatment is and has been for a decade a recognized therapeutic procedure. Its value is in the relief of fever and symptoms which will enable the patient to continue her pregnancy without danger. It has little value in producing a sterile urine and probably is not indicated in the afebrile patient without pain.

Although others advocate continuous ureteral drainage for twenty or thirty-six hours or longer, our experience several years ago indicated that the probable ureteral edema occurring as a foreign body reaction to the catheter over a period of days was responsible for an annoying and often serious rise in temperature soon after the removal of the catheter. We, therefore, continue to use cystoscopic drainage and lavage—a procedure which lasts only twenty to thirty minutes.

Cystoscopic work in pregnancy can be done with practically no pain or distress to the patient, if one is careful to avoid any rough maneuvers.

As the posterior aspect of the bladder is markedly distorted by pressure of the uterus, the insertion of the cystoscope obliquely is necessary to avoid painful contact with the posterior wall. By the oblique insertion of the cystoscope, this painful contact is avoided and a ureteral orifice is readily found. (Fig. 6.) In order to catheterize the opposite ureteral orifice, the cystoscope should be withdrawn slightly before rotating it or moving it toward the opposite side.

Although cystoscopic treatment is effective in improving most patients with pyelitis of pregnancy, it occasionally fails. With a patient who continues her fever and remains toxic, and whose general condition does not improve, interruption of the pregnancy or nephrotomy must be done as a life-saving measure. We prefer the former procedure except when the family demands that the pregnancy be continued.

The urine of the patient who has had an acute pyelitis during pregnancy usually continues to be infected during the remainder of her pregnancy

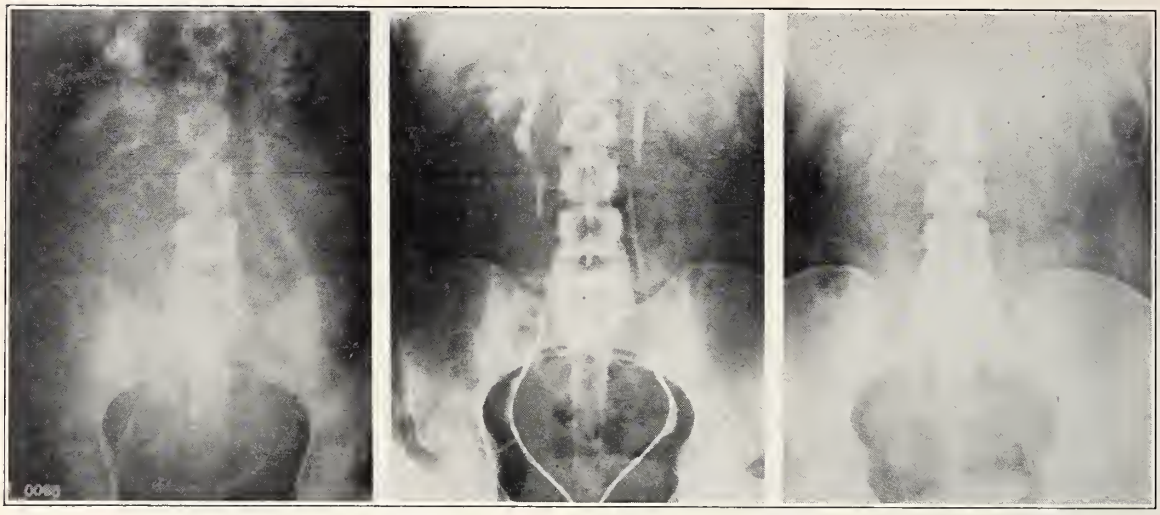


Figure 7. M.F. Left: Severe pyelitis eighth month of pregnancy relieved by cystoscopic treatment. Middle: Eight months after delivery constrictions in upper right ureter remain. Sterile urine. Right: Twenty months after delivery upper right ureteral constriction still present. At operation fibrous bands and aberrant veins were found.

unless in the quiescent chronic stage urinary antiseptics prove to be successful. Sodium acid phosphate and methenamine have in the past seemed ineffective in sterilizing the urinary tract during pregnancy. Recently acidification and the use of mandelic acid have proved more successful in the afebrile, chronic phase, but certainly mandelic acid therapy should not be used in the acute febrile case.

We deem it important to follow the urinary infection to a cure following delivery. Absence of symptoms even with an intense bacilluria is common. Therefore, careful examination of a catheter specimen is essential. Although many cases will clear the urine spontaneously during the first three months of the puerperium, if the urine is not clear of infection four months after delivery, investigation concerning its persistence is indicated. Should the patient enter into a succeeding pregnancy with an infected urine, she is likely to have an acute febrile reaction during the pregnancy. If the urine is sterile before another pregnancy takes place, she has only a small chance of developing pyelitis.[7]

URINARY TRACT STONE IN PREGNANCY

During the year of 1934, we reported a series of fifteen cases of stone observed during pregnancy, nine of which were ureteral and six renal.[8] Several more have been observed since then, the last one being a renal stone in one-half of a horseshoe kidney. (Fig. 8.)

At that time, in view of the negligible information on the subject in the literature, we formulated as a working basis an active policy regarding treatment for the first half of pregnancy, and a conservative attitude during the last four months. Such a general program must necessarily be modified at times.

Urinary Tract Calculi Early in Pregnancy.

During the first four months of gestation with only minor anatomical changes in the upper urinary tract, symptoms due to calculi are essentially the same as in the non-pregnant, although according to our findings microscopic hematuria is less frequent. Diagnostic methods may be employed such as one would use in the non-pregnant.

In our opinion, treatment during this period of the pregnancy should be the same as would be recommended if the patient were not pregnant. In border line cases, however, prompt surgical removal is to be encouraged as averting a possible emergency operation later in the pregnancy when technical difficulties are greatly increased. When, through a surgical exposure during the latter half of pregnancy, one has seen the enormous increase in the blood vessels surrounding the lower and mid ureter, one will not hesitate to take measures which attempt to avoid an operation in that field. During the first half of pregnancy, this intense congestion does not exist, there is plenty of room for a good surgical exposure and very little chance of causing a miscarriage. When seen during the first half of pregnancy, it seems reasonable therefore to advise surgical removal of calculi which are obstructing or in a location where they are likely to become obstructive.

Urinary Tract Calculi Late in Pregnancy.

With upper urinary tract dilatation well established during the last four months of pregnancy, symptoms from renal calculi may not be typical of stone in the non-pregnant. Only one in three that I recall had a true colic. An associated pyuria may offer sufficient explanation of the patient's

[7] Crabtree, E. G., and Prather, G. C.: *Jour. A. M. A.*, 1923: 101:1928.

[8] Prather, G. C., and Crabtree, E. G.: *Urol. & Cutan. Review*, 1934:38.



Figure 8. S. Left: K.U.B. *plate showing renal stone. Third month of pregnancy. Right: Intravenous pyelogram—renal stone in horseshoe kidney. Third month of pregnancy.*

pain and the diagnosis may be missed unless x-ray examination is done. Absence of microscopic blood in the urine specimen is not uncommon.

Ureteral stones, especially when in the lower mid or pelvic portions of the ureter often give rise to typical pain and show microscopic hematuria more frequently.

Diagnostic measures such as x-ray, cystoscopy and retrograde pyelography, or intravenous pyelography should be employed without hesitation. With an abundance of fetal shadows in the x-rays, careful study with films taken in the oblique or lateral position is sometimes necessary for a correct diagnosis.

The conservative course which we have pursued under these circumstances seems to be justified by the results. Stones may find a resting place in the dilated calyx or dilated loop of ureter and not cause obstruction. One ureteral stone was definitely canalized and so allowed urine to pass easily. (Fig. 9.) In a few instances with a stone temporarily blocking the uretero-pelvic junction, we have pushed the stone back into a dilated pelvis by using a Garceau catheter through the cystoscope. I have one patient who passed three ureteral stones spontaneously from the lower ureter during the sixth month of pregnancy. By doing so, I am sure, she saved herself and me considerable trouble.



Figure 9. S. Lower right ureteral stone (canalized) seventh month of pregnancy. Patient operated on three months after delivery.

TUBERCULOSIS

In our experience, tuberculosis has been discovered infrequently during pregnancy. I can recall

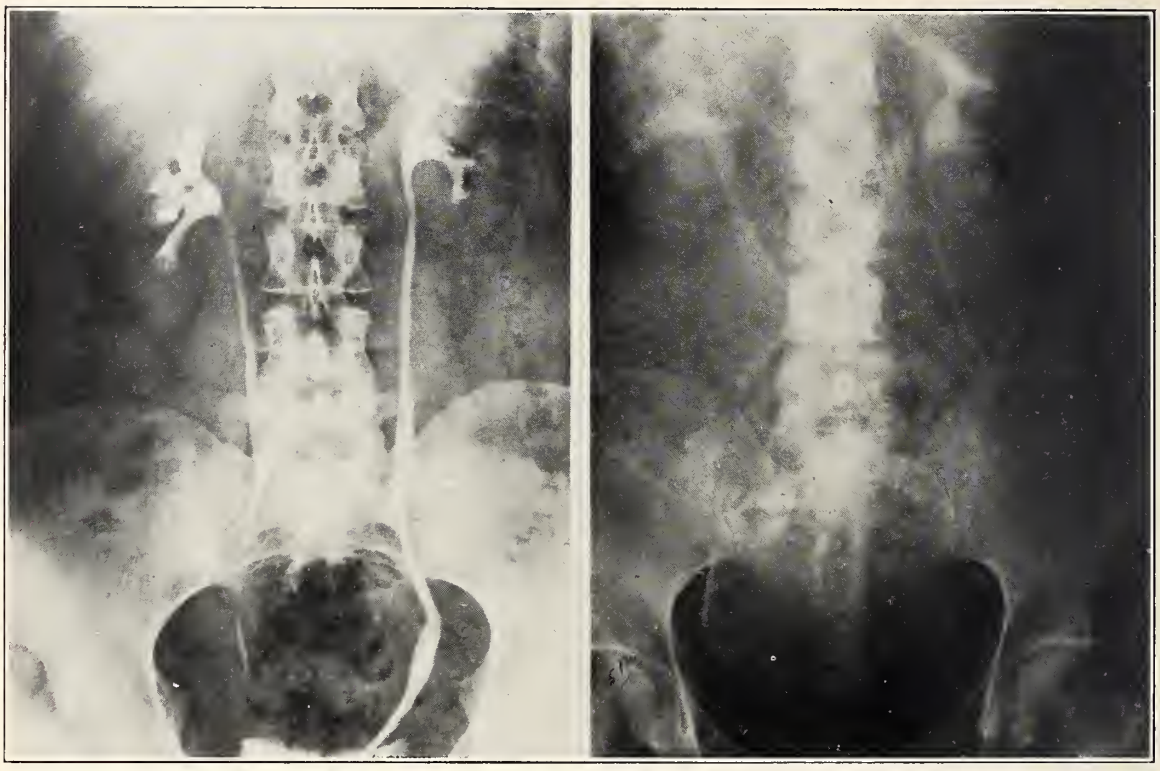


Figure 10. Left: Tbc left kidney six months after delivery.
Right: Tes left kidney intravenous pyelogram seventh month of pregnancy.

only one patient who seemed to have unusually good tolerance for the infection as manifested by a continued normal temperature and absence of symptoms with medical treatment. The infection was unilateral, the patient refused nephrectomy, and continued her pregnancy without further complications. When last seen about two years after delivery, she still had her tuberculous kidney. The success of methylene blue as a form of medical treatment in entirely relieving all bladder irritability has in this instance made surgery unnecessary in the minds of the patient and her family. (Fig. 10.)

Other cases in our experience have not shown this degree of tolerance and appear to have been made worse by the pregnancy. These patients have had the pregnancy interrupted with some immediate improvement in symptoms, and have then been transferred to the urological clinic of a general hospital. The presence of a pyuria with negative culture or no bacteria in the usual stained centrifuged catheter sediment should, of course, make one suspicious of a tuberculous infection.

POLYCYSTIC DISEASE

Polycystic disease has been found only once in our clinic. Infection was present. Renal function tests indicated sufficient margin for the pregnancy and she was allowed to complete the period of gestation. This she did without event, but in the subsequent five years occasional attacks of fever and dull renal pain have occurred.

LONE KIDNEY IN PREGNANCY

Not infrequently an opinion is requested concerning the advisability of the lone kidney patient continuing her pregnancy. What is the outlook for the patient who has had one kidney removed and who is anticipating or experiencing pregnancy? The patient is interested not only in the ability of her kidney to carry her through pregnancy satisfactorily, but also the assurance that pregnancy will have no immediate or delayed effect on the kidney and thereby shorten her period of life. We, as physicians, therefore, must assume a definite responsibility for our advice on such a problem, having in mind the future health of the patient as well as the probable margin of safety during the pregnancy.

Several years ago we reported on thirteen patients whom we had observed, and reviewed the cases which were reported in medical literature.[9] Since that time additional patients of this type have been seen and studied.

One rather surprising fact in the analysis of 207 reported cases was that 55 per cent had had nephrectomy for renal tuberculosis. In 10 per cent pyonephrosis and in 9 per cent calculi were recorded as the cause of nephrectomy prior to pregnancy.

Although there are few opportunities for histological examination of the remaining kidney,

[9] Prather, G. C., and Crabtree, E. G.: *Trans. Amer. Assoc., G. U. Surg.*, 1933:313.

Pousson has said that "the increase in volume relates less to the interstitial tissue than to the glandular tissue so that we have under consideration a condition of true hypertrophy."

During pregnancy these patients experience anatomical changes similar to those in patients with two kidneys. The lone kidney which is normal before the onset of pregnancy maintains its functions in a very satisfactory manner with no unusual findings in the urine and no change in blood pressure unless some definite complication arises.

Complications as judged from our own and recorded cases show no higher incidence than in women with two kidneys. In a series of 296 patients, pyelitis developed in 1.6 per cent; toxemias were reported in 2.7 per cent. These and other miscellaneous complications have in the past made it advisable to interrupt the pregnancy in about 11.5 per cent.

As the result of such a brief statistical survey, it seems obvious that the risk of the lone kidney patient entering pregnancy is not great.

We must, therefore, devote attention to the individual patient and outline the procedures which help to determine whether it is safe for that particular patient to begin or continue a pregnancy. The cause of the nephrectomy is rather important. If the kidney has been removed for tuberculosis, certainly one would endeavor to prove the presence or absence of tuberculosis in the remaining kidney.

Recently I saw a patient who had had a nephrectomy for hypernephroma six years previously. She, therefore, was studied for any evidence of metastasis in addition to renal studies before being advised regarding a pregnancy. No pathology was found in this instance, so that she is entitled to begin a pregnancy without fear associated with uncertainty.

We believe that the renal studies to be done before giving advice on the problem should include anatomical studies obtained by intravenous pyelography as well as functional tests to determine the integrity of renal physiology.

Intravenous pyelography preceded by a plain x-ray film of the urinary tract should disclose stone, congenital anomalies, or hydronephrosis due to other causes than pregnancy, which might make it advisable to correct the fundamental pathology if possible before pregnancy. These conditions, if observed during pregnancy, would indicate interruption in order to protect the kidney against further damage.

It is now well recognized that in addition to examination of catheter specimens of urine, we should employ several of the renal function tests in order to obtain a reliable estimate of renal reserve. While the urea clearance test is one of the most sensitive and should be employed whenever possible, it may not be generally available. One of the various forms of the concentration test supplemented by the two-hour phenolsulphonephthalein examination and blood chemistry will enable one to judge if the remaining kidney has a normal function.

We can definitely state that patients who show no abnormality in these items of study should be allowed to continue their pregnancy under close observation unless complications arise.

SUMMARY

From this discussion of some of the urological conditions which have been encountered during pregnancy, it is obvious that general urological principles, methods of diagnosis, and treatment are employed during pregnancy. In order to interpret symptomatology and pyelographic findings correctly, it is essential that one be familiar with the changes in the urinary tract that occur normally in pregnancy. Treatment of urological complications may, therefore, have to be modified because of the anatomical and physiological changes which occur.

ABSTRACT

Thomas Parran, Washington, D. C. (*Journal A. M. A.*, July 17, 1937), believes that in a country as diverse as this, no one stock plan of syphilis control is applicable. In each state and in each city the problem needs to be studied and a plan of action developed to meet particular local needs. Certain basic principles, however, have general application. These principles may be summarized briefly as follows: 1. There should be a trained public health staff to deal with syphilis in each state and city. 2. Minimal state laws should require reporting of cases, follow up of delinquents, and the finding of sources of infection and contacts. 3. Premarital medical certificates, including serodiagnostic tests, should be a legal requirement. 4. Diagnostic services should be freely available to every physician without charge and should meet minimal state standards of performance. 5. Treatment facilities should be of good quality, with convenient hours and location. Wherever possible the clinic service should be a part of an existing hospital dispensary. Hospital beds should be provided for patients needing bed care. 6. The states should distribute antisyphilitic drugs to physicians for the treatment of all patients. 7 Routine serodiagnostic tests need to be used much more widely. In particular, every pregnancy, every hospital admission, every complete physical examination should include this test. 8. The informative program in modern diagnosis, treatment and control should be prosecuted vigorously among physicians and health officers, especially through the use of trained consultants. 9. The public educational program must be persistent, intensive, and aimed especially at those individuals in the age groups in which syphilis is most frequently acquired. If these principles are applied to meet varying local conditions, no one can doubt that the shadow of syphilis will be lifted from the land. The object of the Public Health Service in fighting syphilis is identical with the historic objective of the medical profession. It is not to make industry more efficient, though it is hoped that it will. It is not to save Americans money, though success will save them very much. It is not to make any one more comfortable and contented, though syphilis causes much discomfort and discontent. It is to make the lives of Americans more healthful and more secure.

BANISHING DIPHTHERIA

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Fort Wayne

Fort Wayne has experienced an unusually severe diphtheria epidemic which began in 1931. The epidemic was due to several reasons: (1) During the depression people neglected to call a physician; mild cases of diphtheria were untreated and, therefore, not quarantined. (2) For economic reasons, wage earners in quarantined homes were allowed to break the quarantine. (3) Because of the large number of cases, physicians were unusually alert, many of them carrying culture tubes, which resulted in the finding and reporting of a large number of carriers.

The records of the Fort Wayne Department of Health show that there occurred 231 cases of diphtheria in 1931, 455 in 1932, 242 in 1933, and 268 in 1934. When it is known that in many cities much larger than Fort Wayne less than a dozen cases per year were reported, our morbidity rate was startling, and the fact was given considerable publicity in the newspapers.

In January of 1935 the mayor requested that the board of health stop this epidemic as soon as possible. Obviously we had too few children immunized, and there were too many carriers. An immunization campaign was planned similar to campaigns carried out by Dr. Bundesen, of Chicago, and Dr. Vaughan, of Detroit. There were two important features of this campaign: (1) the board of health and the county medical society acted as a unit, and (2) the campaign was placed before the citizens as a community project. The correlation and cooperation of a large number of organizations was undoubtedly responsible for the rapidity with which this campaign developed and achieved its objective — the banishment of diphtheria.

The first step was the tabulation of names of unimmunized children. Part of this list was obtained from birth records of children from the age of six months to school age, and the remainder of the list was obtained by circularizing the schools, including those children up to nine years of age. The completed list contained the names of 18,000 children between the ages of six months and nine years.

With everything in readiness, the campaign was officially launched May 6, 1935. In the front ranks, cooperating with the board of health, were the county medical society, the school physicians, the dentists, members of the Visiting Nurse League, and the FERA nurses. Backing these organizations were the city officials, the newspapers, our local radio stations, churches, schools, theaters, physicians' supply stores, character building organizations, civic clubs, parent-teacher clubs, and about 95% of the citizenry. Moving picture films on diphtheria were loaned by life insurance companies and were shown to thousands of people in the theaters.

The mayor proclaimed Child Health Week, and during that period ministers of the various denominations gave radio talks, physicians appeared before the civic clubs, and newspapers published article after article on the subject. Vaccination against smallpox was included in this campaign but was not emphasized as strongly as diphtheria. On May fifth, ministers read from their pulpits articles concerning diphtheria, and throughout the year many of them urged their congregations in church bulletins to have their children immunized. Immunization was rapidly brought before the parents by the school physicians at parent-teacher club meetings. Posters from the State Board of Health were placed in downtown windows.

Immediately following this week of intense publicity, the nurses started out with the cards bearing the names of the unimmunized children. Through the courtesy of the post office officials, the mail sorters arranged these cards according to the mail routes, and this was a great aid to the nurses. All through the hot summer of 1935, FERA nurses, under the supervision of the superintendent of the Visiting Nurse League, called upon the parents of these children, explained the purpose and the process of immunization, and left leaflets of explanation prepared by local physicians and pamphlets supplied by a life insurance company. The method of one injection of alum precipitated toxoid was advocated.

At no time were parents led to believe that immunization was compulsory, and the nurses told the parents to take their children to their family physicians. Beginning May 6, 1935, no immunizations or vaccinations were done at the board of health. If the physician was not paid by the parents, he filed a voucher with the board of health for immunizations, vaccinations and Schick tests. These vouchers were paid with money supplied by the Fort Wayne Community Chest through the Hospital and Home Service Association. The nurses made more than 26,000 calls, and out of this great number there were less than 1,500 refusals. The name of the family physician was obtained from the parents by the nurses. A list of those desiring immunization was sent to each family physician so he would know which of the patients wanted to have this work done. Many of the physicians then talked with the parents, and hundreds of children were immunized during the summer. It was too late to stop the epidemic which started as usual with the beginning of school. To emphasize the rapidity with which these cases developed, it is interesting to note that while there were only two cases in August of 1935, there were thirty-eight new cases in November of the same year.

In September the FERA was discontinued, and under the WPA no nurses were available. The visiting nurses aided as much as they could along

† City Health Commissioner for Fort Wayne.

with their routine work, but systematic follow-up calls could not be made.

The first of December, 1935, we found from our pin chart that the diphtheria cases were localized in one section of the city and were coming largely from one school. Entire rooms were cultured and every child whose throat showed a predominance of diphtheria bacilli was quarantined. By the middle of December, 1935, the epidemic was broken —an epidemic that had lasted for five years. Immunization alone was not accountable for this. Several other factors were important, among them being the fact that we resorted to mass culturing in schools and supplied culture tubes so that school physicians could take cultures while making their routine morning inspections. If the cultures were found to be positive the next morning, the house was quarantined and the family physician was called. Another important factor was that after being quarantined, each member of the entire family had to have two negative cultures before quarantine was lifted. A third feature was enforcement of rigid quarantine, meaning that no one was permitted to enter or leave the house. The wage-earner could leave and stay out providing he had two consecutive negative cultures.

In the spring of 1936, the army of diphtheria crusaders was joined by the local American Legion post which supplied badges for the school children who were Schick negative and certificates for the pre-school children who were free from physical defects, had been vaccinated against smallpox, immunized against diphtheria, and whose teeth were in good condition.

Again in May, 1936, Child Health Week was observed and pages of newspaper publicity appeared with articles written by local physicians on all phases of child health. The board of health inaugurated a system (adopted through the courtesy of Mr. F. J. Osborne, health officer of East Orange, New Jersey) which consisted of the sending of a letter of congratulation with a copy of the birth certificate to the parents of every newborn baby. Six months later, a second letter is sent and this letter discusses immunization, vaccination, and frequent physical examinations by the family physician. At the end of the first year, the parents receive a third letter, similar to the second, and a fourth letter is sent when the child reaches pre-school age.

In May, 1936, a survey showed that there still were too many unimmunized children, so the board of health and the local county medical society agreed to hold "immunization days" at the St. Joseph Hospital, the Lutheran Hospital and the Methodist Hospital. The board of health supplied the materials for immunization, vaccination and Schick test; the hospitals supplied nurses, syringes, etc., and the physicians served without charge. The visiting nurses and the parochial school nurses made appointments with parents to bring their children in, and when it was necessary, transportation was supplied. No children were brought to these clinics without the permission of their family physician. Later clinics were held in the offices of the board of health, but all medical services were provided by physicians who did the work voluntarily. In January, 1936, only twelve cases of diphtheria were reported, and in July, 1936, for the first time in many years, Fort Wayne was free from diphtheria. When school reopened in the fall, it did so without the usual incidence of diphtheria.

Through the generosity of a local life insurance company and a local department store, a public health nurse was employed in August for the remaining five months of 1936. On January 1, 1937, she was added to the payroll of the Fort Wayne Department of Health. She, along with the parochial school nurse, contacts the parents of every baby as soon as it becomes six months old and explains the necessity for frequent physical examinations and emphasizes the need for immunization, vaccination and the Schick test. These visits are repeated as often as necessary. To facilitate the promotion of these procedures, the board of health pays the physicians if the parents are unable to pay. By this method we hope to immunize practically every child before the age of one year, and to put Fort Wayne on the preferred list of cities that have long since forgotten diphtheria.

In 1936, there were 47 reported cases of diphtheria, 24 of them occurring in adults. Adult diphtheria seems to be the natural sequence of immunization. To stamp out this adult diphtheria, every possible contact of each case is cultured and, if positive, placed in quarantine. Now, two years after the campaign was officially announced, our people are free from both diphtheria and smallpox.

In the five years that the epidemic lasted, there were 1,421 cases. The mortality rate is confusing because previous to the appointment of the present board in 1935, the cause of death was recorded differently. During this administration, we have reported every death as diphtheria, regardless of whether the patient died of cardiac paralysis, pneumonia, or any other diphtheritic complication. In 1935 we had eight deaths, the youngest being two weeks old and the oldest sixty-two years old. In 1936 two little girls, one aged nine months and the other aged thirteen months, died of laryngeal diphtheria, which is certainly a strong argument for immunization at six months. For more than a year there has not been a single diphtheria death.

Another feature of this epidemic that was at least interesting to the taxpayer, and which was emphasized during the campaign, was the enormous cost of diphtheria. The cost of the antitoxin alone amounted to approximately $1,000 in one year. In 1935, 2,371,000 units of antitoxin were dispensed to the family physicians. In addi-

tion, a large amount of the time of the sanitary inspectors was required to properly quarantine and supervise these cases. Since the banishment of diphtheria, the same personnel inspects regularly nearly 400 eating and drinking places and 1,100 farms that provide milk for local dairies. These are rather striking figures, not only for physicians but also for citizens and taxpayers.

In May, 1937, we observed May Day and Child Health Week for the third time. We consider this period to be not only an opportunity for education, but also to celebrate the better health of our community and to report to our citizens the success of their efforts. The board of health and the local medical society, supported by those agencies mentioned previously, were able through the generosity of newspapers and advertisers to convey to the public a very satisfactory report.

We find that people are becoming interested in all health propaganda, especially if it affects their children. We intend to continue, as we have in the past two and one-half years, to consider each day as Child Health Day; Child Health Week is the time to publicize our appreciation to those who have aided us and to renew our pledge of further protection against preventable diseases.

CONCLUSIONS

We are able to draw the following conclusions from our experience in breaking our diphtheria epidemic:

1. It is necessary to have close cooperation between the official department of health, the physicians, hospitals, and nursing organizations.

2. An epidemic is a civic problem just as much as a flood or any other disaster. It requires the support of city officials and religious and civic organizations as well as business and industry.

3. Alum precipitated toxoid appears to be safe and quite efficient between the ages of six months and nine years. Severe reactions occurred in children over ten.

4. Spasmodic publicity is useless. If diphtheria is to stay banished, the educational program must be continuous from the time the child is born until he enters school where he is under the supervision of the school physician.

5. Along with immunization, a smallpox program and the correction of physical defects can also be promulgated.

6. Preventable contagious diseases cause unnecessary expense to the taxpayer, and this is particularly true of the economic losses involved in diphtheria.

THE PSYCHONEUROSES

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It is difficult in the present state of our knowledge to define precisely what is meant by the term neurosis. This is due partly to our lack of knowledge of the ultimate cause or causes and part to confusion of terminology and conflict of points of view. For our purpose it is, perhaps, better to look upon the neuroses as one large group of symptoms which have numerous manifestations but which have a number of underlying factors more or less common to all of them.

The outstanding distinction between the neuroses and the psychoses is that in the former only a part of the personality is affected, while in the latter the change involves the whole personality. The real difference then is simply a matter of degree. We frequently come across neurotic symptoms in psychotic patients and it is not unusual for a neurosis to pass into a psychosis. This is brought about by the intensification of the symptomatology of the neurosis; unreality becomes falsification of reality called delusions. The sense of being deficient becomes unworthiness, sin, and punishment. The change in bodily sensations passes from the state of severe hypochondriasis to the somatic delusion. A frequent delusion growing out of the feeling of inadequacy is that the patient is no longer able to conceal his thoughts from others and I have had patients refuse to tell me anything about themselves, stating that I could read their thoughts faster than they could think them. This feeling of inferiority is a frequent symptom of certain forms of the neuroses and is quite painful. The patient constantly makes comparisons between his former self and as he is and may even come to believe that he is someone else, or that his body contains a dual personality.

Underlying every theory of the neuroses is the assumption that there is a definite hereditary or constitutional factor which plays the ultimate role in their causation. Environment may play a small factor and so may disease and privation by bringing about a lowered resistance of the nervous system, but by far the greatest factor is the inheritance of a neuropathic personality. In other words, no neurosis will grow on unprepared soil. Where no germ of neurosis is already existing the trauma will pass away without leaving a permanent and effective mark. To make it really effective, the patient must meet the shock with a certain internal predisposition. This is proved by the fact that wherever a number of people, all living under the same conditions, are subjected to a severe mental strain only a small percentage of them will develop a neurosis which would certainly not be the case if the cause of the neurosis was due primarily to the mental strain under which they lived. If this were the case, they would all become

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neurotic. One of the principal causes given for a nervous breakdown is overwork but it is very doubtful if overwork, either physical or mental, ever injured the health or vitality of any one if unaccompanied by anxiety and disgust. The man who enjoys his work, who gets a kick out of what he does, not only accomplishes a great deal more than the man who does work that is distasteful to him, but the strain on his nervous system is decidedly less. We are all cognizant of the fact that one may inherit the color of his hair, color of eyes, muscular development, height of stature, etc.; then why cannot we inherit a nervous system that is or is not easily affected by strain? Dr. Emerson believes the neuroses occur among people who have inherited a predisposition to nervous and mental diseases brought about by a continual mental tension in their ancestors and that we can transmit this tendency to our children. He states that the average American lives a life of continual mental tension in the endeavor to secure something a little better than he already has, and when he attains this he is not satisfied but continues to strive for something better still. This brings him into competition with others and although competitiveness does no harm to the powerful personality and very little harm to those not affected by it, or who cannot be roused into competitiveness, yet, to the mass of men and women competing with each other in a thousand and one ways, from the size of their bank account to their personal appearance, competitiveness is injurious since it frequently brings failure and disappointment and leads to mental strain. In countries where women marry young and raise families instead of seeking careers and men become carpenters and shoe cobblers because their fathers are, competitiveness, in the true sense of the word, and therefore mental strain, does not exist and neither do the neuroses to any extent, but in this country where the sky is the limit, where every one has a chance to be president of the United States, the president of a bank, or a railroad official, competitiveness is at its best and so are the neuroses.

I do not mean to infer that one should be content with the station in life into which he is born. Ambition is a great thing and is admired by everyone, but the great trouble is that very few people recognize their limitations; their ambitions are frequently way beyond their capabilities and the result in many cases is failure with all the mental anguish that accompanies it and, to the susceptible, a neurosis. Competition is found not only in the business and political life of an individual but in the social life as well. Trying to dress better than any of our associates, to entertain our bridge clubs more elaborately than any of the other members, to drive a better automobile than Mrs. Smith, all mean competition and all that goes with it, including mental strain and tension.

Although there are innumerable symptoms associated with the neuroses there are a few that are found in practically every case, and as it is not the intention here to describe the different types of neuroses, we will describe the general symptoms.

When we are in good mental health, when our libido (creative force) is flowing outward in interest upon the external world of reality and our threshold of consciousness is raised, it is only with great difficulty that we are able to bring into consciousness our visceral activities. We do not feel the impact of the heart against our ribs. The gastrointestinal tract only occasionally gives us evidence of its existence and we pay no attention to our breathing. We know, of course, that the heart is beating and pumping blood to all parts of the body, that the gastrointestinal tract is taking care of digestion and elimination and that our breathing takes care of the oxidation of the blood, but our interests are too much taken up with the shaping of our environment to give these things very much attention. When, however, some difficulty arises in our environment with which we are not able to deal successfully, a very different picture presents itself. To the susceptible there is a slowing down of the flow of energy outward. It is dammed up and finally flows backward into the individual, and instead of the individual influencing his environment, the environment influences him, and he becomes an introverted individual. The reaction of the environment upon the individual is a feeling of fear and apprehension. He feels that something terrible is going to happen, that the whole universe is against him. There is a lowering of the threshold of consciousness and all the visceral sensations not heretofore noticed rush into consciousness. He hears the beating of his heart and may think he has heart disease or he may experience unusual sensations in the intestines or other parts of the body, all of which add to his apprehension. He spends more and more time worrying about himself until finally his original difficulty is forgotten and he devotes all his attention to himself. When this occurs the individual is suffering from a neurosis.

One of the first symptoms noticed in the development of the neuroses and one that is always present is a feeling of fatigue. The patient tires easily and under less exertion than would ordinarily be expected to bring it about. Things that he had been in the habit of doing without any special exertion now cause him to feel exhausted and with this feeling of fatigue goes a disinclination to exertion. It takes considerable effort for him to do the simplest task. There seems to be something that drags him back in everything he does so that he has to use considerable effort to do the smallest things, such as going to meals, shaving, etc. On the mental side these patients complain of inability to concentrate and failure of memory. They find concentrated and directed attention wearisome and in the severe cases they are actually incapable of such activity. In the severest neuroses this feeling of fatigue disappears. An agitation appears,

energy shows itself in the anxiety reactions, but concerted, purposeful working becomes displaced together with the loss of feeling of fatigue. Such patients never feel tired but also they never derive any pleasure from anything they do.

A constant symptom of the neuroses (especially in the milder cases), or at least the symptom complained of most, is the paresthesiae which affect practically every part of the body. The head aches, the hands feel numb, there is an ache or tired feeling in the neck, the feet burn, there are black spots before the eyes, noises in the ears, the teeth ache, there is a bitter taste in the mouth, and innumerable others. These paresthesiae cause the patient considerable concern. They frequently change from day to day, but occasionally we find cases in which a certain type of paresthesiae becomes dominant as the chief complaint of the patient. The writer had a woman patient who complained for months of nothing but a tightness of the head (like someone was pressing the head between the hands) that kept her awake at night and prevented her from doing anything during the day. Nothing can be done for these paresthesiae, but many an operation has been mistakenly performed for their relief when a careful history would have revealed that the painful and uncomfortable sensations were too diffuse and too fugitive for organic disease.

The hypochondriasis is secondary to the symptomatology and represents the seeking for cause of the symptoms and fear which unusual conduct and sensations of the body engender. These people will admit that they are nervous but they will never admit their symptoms are due to nervousness. They are sure they have heart disease, kidney trouble, brain tumor, diabetes, or a number of other conditions, and nothing that their physician tells them has any effect in lessening their belief. This class of patients represents the men and women who spend all their time and money running from one physician to another and getting relief from none. A certain number of them recover, others decide no one understands their condition and resign themselves to a life of suffering, and a few pass into the psychoses and end their days in an institution.

In the normal individual there is a desire to do things, no matter what they may be, attending to business, meeting friends, playing a game, eating, going to a movie, etc., and he enjoys doing them. There is a pleasure and satisfaction derived from simply keeping busy, just in doing something, but in the neuroses an entirely different state of affairs exists. The patient not only has no desire to do things but even the thought of exertion is unpleasant to him. The appetite fails, there is no desire for food, the food does not taste natural or there may be actual vomiting at the thought of eating. Most patients eat enough to sustain them but they complain that everything tastes alike and they eat simply because they must. Others complain that eating causes them to bloat or causes distress in the gastrointestinal tract. One can see how easy it is for ideas like these to become out and out delusions. In looking around for a cause as to why these things should be, the thought occurs that they could be due to something put in the food and finally this idea is adopted and may finally lead to marked ideas of both poisoning and persecution.

These people nearly all have sleep disturbances of one kind or another. Some cannot sleep, but lie awake not being able to relax sufficiently to woo sleep. They think of a thousand and one things and finally get so restless they have to get up. Others fall to sleep as soon as they get into bed, but after a few hours of sleep they lie awake the rest of the night. They all complain that sleep does them no good; they get up in the morning feeling worse than when they went to bed. When the neurosis becomes profound there is no desire for sleep, the feeling of fatigue disappears and a profound restlessness takes its place. The patient cannot sit still or lie down but wants to be on the go all the time.

The sexual appetite diminishes in those suffering from the neuroses and may be anything from an indifference which may be overcome to actual disgust and abhorrence. In the male there is an irritable weakness indicated by premature ejaculation and incapacity for sustained relationship to complete absence of desire. In the female there may be a restless craving which finds satisfaction difficult or impossible, or there may be complete loss of desire.

Another symptom quite common in the neuroses is the feeling of doubt. They are not able to choose for themselves, they have no confidence in their own choice; even dressing becomes a task because they are unable to decide what clothes to wear. The feeling of doubt is always very disturbing when protracted and is linked to an anxiety and restlessness which is often more painful than even fear itself. It causes a mental conflict which sways the patient first in one direction and then another and is quite a factor in the development of an inferiority complex.

In these patients there is not only a lack of interest in everything but a lack of value and a leveling of the emotions. The patient no longer feels the usual surge of affection in his wife and children, he cannot arouse himself to be interested in his business. He derives pleasure from nothing. He is in a state of apathy. This condition is bad enough but the fact that they have insight sufficient to recognize their loss of interest and are distressed over it makes conditions much worse.

These patients (the psychoneurotics) are the hardest people in the world for whom to do anything. They are so sure they know what is the matter with them, they understand their condition so much better than anyone else, that any advice you offer them has little or no effect on them. They

bitterly complain of their condition but make no effort to carry out instructions given them by any one. They talk continually about themselves, and if one should be successful in getting them to talk about something else, they will immediately return to the only subject they are interested in, themselves.

A big majority of the psychoneurotics are sure there is an organic condition to account for their suffering. Some are convinced that they have heart disease, others have kidney trouble, while others have a gastric ulcer and a physician is losing time in trying to convince them such is not the case. These ideas of a somatic disease are just as inaccessible to argument as a delusion is in an insane individual. In fact, there is quite a similarity between the two and the ideas of the neurotic can and do frequently pass into the delusions of the psychotic which further goes to prove that the difference between the neuroses and psychoses is simply one of degree. The previous history of many cases of psychosis shows a long history of neurosis, the psychosis following the breakdown of the personality. This is especially true in those cases diagnosed as dementia praecox. A careful history will often show that the patient became shut off in the world of delusions because he could not bear to exert himself, could not bear the stimuli of others or their scrutiny, or his own inadequacy.

It is not the intention of this paper to go into the subject of treatment; suffice it to say that anything that will take the patient's mind off himself and direct it to things in his environment will be beneficial. These patients are not interested in anything but themselves and their treatment is really a re-education and naturally very slow. Hydrotherapy, occupational therapy, recreational therapy, are all beneficial in their place and should certainly be used. All these patients crave sympathy which is the worst thing in the world for them. Sometimes it is even necessary to be a little cross with them. They should be kept busy as much of the day as possible, it does not matter what they do just so they do something. If this can be done (which is almost impossible outside an institution) an interest will sooner or later be created and when this occurs the battle is half won. These patients do much better in an institution, for the simple reason that the physician has complete control of them and can see that his instructions are carried out, which he certainly cannot do in a private home.

PRELIMINARY PROGRAM

FOR FRENCH LICK SESSION

ON PAGE 402

COMPLICATIONS OF ARTIFICIAL PNEUMOTHORAX

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Artificial pneumothorax as a method of treatment for tuberculosis was first advocated by Forlanini[1] (1882-1894) in Italy. Dr. John B. Murphy[2] (1898), of Chicago, independently made the same discovery but later gave full priority to Forlanini. The procedure was at once seized upon by many of those suffering with tuberculosis and it is said that Murphy's Clinic became so swamped with tuberculous patients that he gave up the treatment entirely, turning his cases over to his assistant. As usual, however, this sudden popularity soon waned for it was found that many cases were not suitable for treatment. In fact probably most cases were unfit for this kind of therapy for the x-ray was in its cradle and the discovery of the early case was uncommon. Then, too, it was found that frequent refills were necessary and this added another discouraging note. It was not until 1912 that it was re-established in this country on a sound basis. The growth has been slow but steady until today literally thousands of patients are receiving this means of treatment.

Although the technique is very simple it is obvious that when one to three liters of air are introduced into the pleural space even in amounts not to exceed 500 cc. at one time, the result is a major one, namely the collapse of a large diseased viscus and the creation of a large air space with an endothelial lining. It is not surprising, therefore, that complications are numerous and frequent although they may be relatively harmless. The most common of these are referred to below with a brief mention of their treatment.

PLEURAL ADHESIONS

Adhesions of some degree are almost constant in anything but a very early case. Their presence depends on the amount of pleural involvement and for this reason it is occasionally found impossible to establish a pneumothorax in a case which is classified as "minimal." As a rule, however, complete symphysis of the pleurae is more common in the advanced than in the early case. Usually the pleura is adherent over that part of the lung which is diseased. When air is introduced, the lung may peel off entirely free, or the air may dissect through the adherent area producing, as the lung collapses, string or band-like adhesions which stretch and elongate as the lung recedes. On the other hand, the apex, which is the most frequent

[1] Forlanini, Carlo: A Contribuzione della Terapia Chirurgica della tisi. Ablazione del pulmone? Pneumotorace artificiale? *Gazz. d. osp., Milano,* iii, 537-539; 705-707, 1882.

Forlanini, Carlo: Primi tentavi di pneumotorace artificiale della tisi polmonare. *Gazz. med. di Torino* 45:381-384: 401-403, 1894.

[2] Murphy, J. B.: Surgery of the Lung, *J. A. M. A.,* Vol. 31:151, pp. 208, 281, 341, 1898.

site of disease, may be so firmly adherent that no dissection is possible. In both instances a good therapeutic result may be obtained either by (1) stretching the adhesions to a point which permits healing or (2) by indirect pressure from below upward, if it is an apical lesion. When, after a fair trial, it is seen that collapse cannot be established, treatment consists of either cutting the adhesions, or, if this is not possible, abandoning the pneumothorax in favor of a thoracoplasty, or simply doing nothing, trusting that the patient will get well on bed rest.

OBLITERATIVE PNEUMOTHORAX

In cases of pneumothorax with prolonged fluid formation, the inflamed visceral and parietal pleura will often unite as the fluid is absorbed or removed. The common site for synechia to form is at the base of the lung.

Gradual expansion takes place until the space is lost entirely. This is undesirable as often the pulmonary lesion is far from healed. Attempts to maintain the space by more frequent or larger refills only raises the pressure and adds to the discomfort of the patient.

Obliterative pleurisy is also a common finding in long standing cases of pneumothorax in which fluid has never been a complication. In this latter type of case the reason for obliteration is not entirely clear. Since it usually takes place after two or three years of refills, the treatment may often be safely abandoned.

The remedy in both instances, if one wishes to continue collapse therapy, is to substitute oil for air, the weight of the oil making it impossible for the pleural layers to unite further.

It is obvious, however, that if fluid is present, especially purulent fluid, the creation of an oleopyo-thorax will increase greatly the complexity of the treatment. In most instances it is more satisfactory to allow the lung to re-expand and then do a de-ribbing operation if indicated.

FLUID

Formation of fluid takes place in about 90 per cent of all cases receiving pneumothorax. Fortunately it is usually small in amount and transient in character. It may, however, be massive and persistent. The cause of its formation may be obscure but it is usually due to a too high intrathoracic pressure, stretching of adhesions, tearing of the visceral pleura allowing tubercle bacilli or other organisms to escape into the pleural space or introduction of organisms through the needle. Small amounts of exudate may form several times during the course of treatment and disappear spontaneously. On the other hand the effusion may increase in size until removal becomes necessary, not once but many times. If fluid is persistent the character of the exudate usually changes after a time. At first the fluid is clear and straw colored but later it becomes turbid and then thick until it is the true pus. In rare instances a bloody exudate will form. The clear exudates may be sterile, depending on their cause; but frequently, if centrifuged and injected into animals, tubercle formation takes place. When the exudate becomes purulent it may be (1) purely tuberculous, or (2) due to a mixed infection, the latter being the more dangerous of the two.

Clear effusions require only aspiration, the fluid being replaced with air. The treatment of tuberculous emypema has been clearly stated by Hedblom[3]:

"In a primary tuberculous empyema without secondary infection, treatment consists of repeated aspiration of pus and replacement with air, always leaving the pressure at slightly less than atmospheric. Failure after some months of such treatment to cure the empyema is an indication for thoracoplasty. If secondarily infected, closed drainage is indicated with irrigation with Dakin's solution, provided there is no bronchial fistula; in the presence of a large bronchial fistula, open drainage may be needed. Often a thoracoplasty or a plastic operation will be necessary for complete healing, since the lung re-expands only in part. In secondary tuberculous empyema, including those resulting from artificial pneumothorax, the treatment of choice is early thoracoplasty, both to obliterate the empyema cavity as well as to aid the healing of the underlying pulmonary lesion."

SPONTANEOUS PNEUMOTHORAX

This complication occurs fairly frequently and results from a tear or puncture of the visceral pleura. Undoubtedly small leaks occur due to needle puncture but sealing of the small stoma is usually rapid and the amount of air that escapes is small. If a rent is torn in the pleura over a cavity or over diseased lung, exposing a bronchus, a large amount of air escapes at once and continues to escape. This results in a tension pneumothorax of internal origin and requires immediate treatment. If nothing is done and the leakage continues, a high pressure is soon built up which ends in respiratory failure and death. It is obvious that if every lung were perfectly free in the pleural space, spontaneous pneumothorax of a dangerous degree would be rare. In certain cases there is a discharge of organisms or frank pus or blood depending on the site of the pleural tear. Another factor is the excursion of the lung during respiration and indirectly the vital capacity, for the accident occurs much more often when bilateral pneumothorax is being employed than in the unilateral variety. Large amounts of air in a unilateral case would have the same effect and this is the reason why small amounts are desirable especially in the early stages of the treatment.

A diseased friable pleura is more apt to tear than a healthy one. To cite one case: J. W. had bilateral disease. Pneumothorax was started on the left side. A spontaneous pneumothorax took

[3] Hedblom, C. A.: Surgical Treatment of Empyema, *Jour. Thorac. Surg.*, Vol. 2, p. 115, 1932.

place shortly after treatment was begun. Air was removed until the leakage stopped. Fluid formed and the lung collapsed. The fluid was removed and replaced with air at intervals. After a year and a half, the lung began to re-expand and the pneumothorax space was lost. Treatment was then begun on the right side and on the second refill another spontaneous collapse occurred. This, too, closed more or less of its own accord, but not before the lung was completely collapsed. Fluid again formed but eventually disappeared. The patient is still taking refills.

Tension pneumothorax requires immediate and persevering treatment. This is accomplished by removing air by means of large syringes or by reversing the pneumothorax apparatus. If continuous removal is advisable the needle and tubing may be connected to an electric suction machine. The ordinary laboratory filter pump is also to be recommended (Crimm, Strayer, 1932)[4] not only because it is inexpensive but because the rate of removal is easily controlled by adjusting the valve of the water faucet.

EMBOLISM

Air embolism is the most immediately dangerous of all the complications of pneumothorax. It may be exogenous or endogenous in nature. That is the air may (1) enter the pulmonary vessel directly from the needle or it may (2) enter the vessel from an adjacent bronchus after the needle has pierced them both or (3) directly from the already established pneumothorax into the vein. The amount of air required to produce death in this fashion is very small since the vessel usually punctured is a pulmonary vein and air entering it will go immediately to the left heart and from thence to the brain. In other words there is no chance for the air to filter out in the pulmonary capillaries as there is when air is introduced into perhaps a systemic vein of the arm. Formerly many deaths were attributed to "pleural shock" which were probably due to air embolism. This recognition has been due largely to the work of Schlaepfer[5] who induced death in dogs by the injection of 1 cc. of air into a pulmonary vein. He also demonstrated small veins in adhesions between the lung and chest wall which empty directly into the tributaries of the pulmonary vein. He furthermore showed that gravity plays an important role in directing the air to the brain. If the dog was in the semi-erect position at the time of injection of air into the pulmonary vein, death would occur more quickly than if in the horizontal position.

The symptoms may vary, depending on the amount and location of the air. When the issue is fatal the usual sequence is cough, coma, convulsions and death. The clinical picture is not unlike that of an eclamptic fit. Cyanosis is intense and increasing. All cases do not end fatally by any means, but may recover from the coma with no ill effects. Those which have an immediately fatal result are less than 10 per cent of the number in which the accident occurs. Occasionally there is a residual paralysis of an arm or a leg or one side of the face which passes away after a few hours. Death has also been attributed to air entering the coronary artery. There is no effective treatment for air embolism and patients are best left alone. Placing them in the Trendelenburg position is about the most that one can do but by the time one discovers the accident it is usually too late for this treatment to be effective. Artificial respiration is contraindicated.

The accident does not happen very often, according to most writers, about once in one thousand injections and practically always on the initial attempt or in cases in which there is a selective collapse where the lung closely approximates the chest wall.

PLEURAL SHOCK

During the early days of pneumothorax many deaths were reported as being due to pleural shock, the theory being that it was "pleural reflex syncope" (Cocke[6], 1935) due to stimulation of the vagus nerve. The theory is not very popular any more as deaths which were formerly attributed to pleural shock have been proven by experiment and by autopsy to be due to air embolism. The fact that symptoms appear before the operator allows any air to escape through the needle may lead one to the mistaken diagnosis of pleural shock but it has been proven that transfixion of both a vein and a bronchus as described above will create a bronchovenous fistula with a resulting air embolism. That pleural shock exists is not denied but as a cause of death it is very rare indeed.

NOVOCAIN POISONING

This complication has been reported several times (Waldbott[7], 1934) and is apparently due to (1) injection of novocain into a pulmonary vein; (2) sensitivity of the patient to the drug. In the opinion of the writer a combination of these two factors is responsible for the serious accidents that take place. Sensitivity to novocain is uncommon and certainly the probability of injecting more than 0.2 cc. of the drug into a pulmonary vein is very small and not per se a cause of death. The symptoms are almost identical to those of air embolism and are due to the same cause, viz., paralysis of the brain centers. If the respiratory center is paralyzed, artificial respiration is indicated. Other methods of treatment are usually ineffective.

MEDIASTINAL SHIFT

Mediastinal shift occurs most frequently in relatively early cases of tuberculosis in which the

[4] Crimm, P. D., and Strayer, J. W.: The Use of a Filter Pump in the Treatment of Spontaneous Pneumothorax and Pleural Effusions. *Jour. of the Ind. State Med. Assn.*, Vol. 15, p. 371, 1932.

[5] Schlaepfer, K.: Collateral Circulation in Chronic Obstruction of the Pulmonary Veins and Its Relations to Air Embolism Following Various Diagnostic and Therapeutic Procedures, *Sur., Gynec. & Obst.*, Vol. 37, p. 510, 1923.

[6] Cocke, C. H.: Pleural Shock, *Amer. Rev. Tuber.*, Vol. 31:4, p. 404, 1935.

[7] Waldbott, G. L.: Allergic Shock from Substances Other Than Pollens or Serums, *Ann. Int. Med.*, Vol. 10, p. 1308, 1934.

mediastinum has not become fixed.

A shifting mediastinum is not necessarily a dangerous complication but one which may defeat the purpose of the pneumothorax. If the cavity has a stiff wall or if it is suspended by adhesions, the flexibility of the mediastinum may prevent its collapse and other methods of treatment will then have to be resorted to. Cutting of the adhesions may allow the lung to recede under pressure which will not cause any shift of the mediastinum. Thoracoplasty is not a solution but may be a cause of this complication. If the mediastinum can be fixed by the injection of irritants and the creation of fluid with ultimate obliteration of the pleural space then thoracoplasty may be employed with a favorable result.

HERNIA

In contrast to mediastinal shift which implies mobility of the entire mediastinum and its contents, there may be a local weakness usually in the superior-mediastinum which allows the lung under pressure to extrude into the contralateral pleural cavity. It is usually the result of putting in too much air under too high a pressure. It is not serious although it is conceivable that a hernia could reach proportions capable of causing a rupture of the mediastinum. Ehrenburg[8] (1932) has reported a case of emphysema of the mediastinum. The remedy for hernia is to remove air until it disappears.

PULSE AND RESPIRATION

Rapid pulse and an increased respiratory rate occur commonly after refills and are usually in direct proportion to the amount of air introduced. In the early stages of treatment when the lung is acutely inflamed, compression frequently increases the toxicity of the patient for a time with all of his "normal" symptoms being exaggerated. The temperature, for instance, may be elevated several degrees. Cough and expectoration are also increased after the first refills, especially if a cavity is present. As the lung begins to heal, however, these symptoms become negligible and finally disappear entirely, except for those due to diminished vital capacity. Cyanosis is rare since there is ordinarily no unrespired blood in the circulation under the physiological conditions imposed by a pneumothorax.

PAIN

When the needle pierces the chest wall, the pain is of two varieties, somatic (skin) and visceral (pleura). By anesthetizing the skin and the needle track with novocaine very little pain is experienced although it depends largely on the patient. After the first few treatments there is seldom any severe pain although sensitive and apprehensive people may complain after years of treatment. The most intense pain is the result of air separating the inflamed pleural layers as space is made following the first treatment. Narcotics are often necessary to relieve it. Trauma to the visceral pleura or the lung itself is not a source of pain as these organs do not contain sensory nerve fibers.

[8] Ehrenburg, G. E.: Emphysema of the Mediastinum as a Complication of Artificial Pneumothorax, *Amer. Rev. Tuber.*, Vol. 16, p. 466, 1932.

SUMMARY

The important complications of pneumothorax have been discussed with a mention of their treatment.

EARLY OPERATION IN THE ACUTE GALL BLADDER*

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From a histological standpoint the definition of an acute gall bladder is a relatively simple matter. If a microscopic section presents an inflammatory cell infiltration, necrosis, gangrene or infarct, it may be termed an acute gall bladder. On the other hand the clinical definition is far less concrete. The classical picture is a sudden onset of pain in the right upper quadrant often radiating to the back; chill, nausea, and vomiting; involuntary muscular rigidity and tenderness; elevated temperature, pulse, white count, and differential. Unfortunately this complete syndrome is seldom present. The most constant findings are those of local pain and tenderness. These, however, may be found in relatively benign lesions such as gall bladder colic or hydrops.

The present study deals with those cases which have acute cholecystitis as defined by the pathologist. Also included are those cases which are acute to clinical examination. Patients with simple gall bladder colic or chronic cholecystitis without evidence of an acute inflammatory process are not included in this discussion.

The question of early or delayed operation upon the acute gall bladder is one which has caused considerable controversy in medical literature. During the past ten years there have appeared a great many quite convincing discussions to the effect that the acute gall bladder is a surgical emergency and should be promptly removed. Claims of lowered mortality following prompt operation have been backed by impressive case summaries.

Heuer[1] cites 74 consecutive cases of acute cholecystitis at the Cincinnati General Hospital in which 18 were gangrenous at time of operation. Three of these 18 perforated or became gangrenous on the wards waiting for operation while 43 per cent of the remaining 56 cases failed to subside and had to be operated upon. Heuer further points out that gangrene and perforation are more common in the

* Presented before the Indianapolis Medical Society, Jan. 12, 1937.

[1] Heuer, G. J.: Errors in Diagnosis and Treatment of the More Common Acute Abdominal Conditions. *W. Virginia M. J.*, 26:261, 1930.

older age group—the very patients in whom it would be more desirable to delay operation. He concludes[2] that complications of gangrene, perforation, or pericholecystic abscess may be expected in 20 per cent of acute cholecystitis cases if a waiting policy is adopted.

Zinninger[3], Miller[4], Heuer[2], and Graham[5], analysing carefully cataloged series, point out the heavy increase in mortality if operation is deferred until complications arise. They also point out the frequency with which complications are encountered. The gravity of such complications as gangrene and perforation are indicated by mortalities up to 50 per cent. These same writers indicate the relative safety of removing an uncomplicated acute gall bladder with mortality rates approximating 5 per cent. Of 54 patients observed for 1 to 12 days because of subsiding symptoms, Zinninger found that only 37.7 per cent improved during the interval of observation while the remainder failed to improve or became definitely worse. Judd and Phillips[6] in reporting 508 cases of acute cholecystitis found gangrene at operation in 13 per cent.

The lack of correlation of clinical and pathological findings are emphasized by Touroff[7], Mentzer[8], Eliason[9], Lipshutz[10], and Alexander[11]. These writers point to the frequency with which complications are found in clinically benign cases with relatively low or normal white blood cell counts. They are unanimous in advocating early operation to prevent such mistakes and to lower mortality. In those cases reported by Touroff, 20 per cent were considered progressive and incapable of subsiding spontaneously.

Stone and Owings[12] present evidence for considering the acute gallbladder as a surgical emergency while Pratt[13] feels that any attack lasting more than two hours requires surgical interference. Steinke[14] and Kirschner[15] allow 24 to 48 hours' observation with the adequate administration of fluids and glucose. If improvement is not marked, operation is advocated. All cases of suspected perforation are operated immediately.

These articles represent only a brief cross section of those advocating early operation.

On the other side of the question the literature is less replete. It consists for the most part of opinions such as Flint's[16] or those of Lewis, Deaver, and Archibald quoted by Stone[12]. These opinions are not based upon case analyses, but upon personal impressions. Two exceptions to this are the series reported during the past year by Wilson, Lehman, and Goodwin[17] and by Branch and Zollinger[18]. The former writers analyzed 610 cases of gall bladder disease of which 149 were considered acute. This is more than double the usual incidence of acute gall bladder of other series. Also the criteria upon which these cases were considered acute are not discussed. However, by their own figures, the mortality rate was lower in the patients having early operations than in those having late operations. The authors feel that the differences shown are not sufficient to justify early operation and lean toward a delayed procedure.

In the report by Branch and Zollinger, 235 cases of acute cholecystitis were studied at Peter Bent Brigham Hospital. Here again no mention is made of the basis on which the gall bladder was diagnosed acute. Immediate operation was carried out in 34 patients including 3 who were moribund. The resulting mortality was 20.5 per cent. Delayed operation after an average of 4.7 days resulted in 8.7 per cent mortality. There were 6 unoperated cases of which 3 died. It has been suggested by Heuer[2] that in evaluating the two procedures, the unoperated deaths should be added to those cases receiving the delayed operation. This seems just in view of the fact that these patients died waiting for a deferred operation to be carried out.

It is the general policy in this community when dealing with the acute gall bladder to follow a course of watchful waiting. Therefore, it was thought that a study of those cases treated in Indianapolis hospitals would be extremely interesting and instructive. It would afford an excellent opportunity to evaluate the policy of allowing the acute gall bladder to "cool" before contemplating surgery. Such a study was carried out at the Robert W. Long and Indianapolis City Hospitals. The results have recently been reported in detail[19]. Some of the gross results will again be cited together with additional findings.

Many previous studies have been based on the clinical diagnosis of acute gall bladder or upon

[2] Heuer, G. J.: The Factors Leading to Death in Operations Upon the Gallbladder and Bile Ducts. *Ann. Surg.*, 99:881, 1934.

[3] Zinninger, M. D.: The Surgical Treatment of Acute Cholecystitis. *Ann. Surg.*, 96:406, 1932.

[4] Miller, R. H.: Acute Cholecystitis. *Ann. Surg.*, 92:644, 1930.

[5] Graham, H. F.: The Value of Early Operation for Acute Cholecystitis. *Ann. Surg.*, 93:1152, 1931.

[6] Judd, E. S., and Phillips, J. R.: Acute Cholecystitis. *Ann. Surg.*, 99:77, 1933.

[7] Touroff, A. S. W.: Acute Cholecystitis. *Ann. Surg.*, 99: 900, 1934.

[8] Mentzer, S. H.: The Acute Gallbladder Manifesting Few Signs and Symptoms. *Surg., Gynec. & Obst.*, 55:709, 1932.

[9] Eliason, E. L., and McLaughlin, C. W.: Perforation of the Gallbladder. *Ann. Surg.*, 99:914, 1934.

[10] Lipshutz, B.: Acute Cholecystitis. *Ann. Surg.*, 101:902, 1935.

[11] Alexander, E. G.: Acute Perforation or Rupture of the Gallbladder. *Ann. Surg.*, 86:767, 1927.

[12] Stone, H. B., and Owings, J. C.: The Acute Gallbladder as a Surgical Emergency. *Ann. Surg.*, 98:760, 1933.

[13] Pratt, G. H.: Acute Suppurative and Gangrenous Cholecystitis. *Am. J. Surg.*, 22:46, 1933.

[14] Steinke, C. S.: Acute Gallbladder Disease. *Am. J. Surg.*, 27:135, 1935.

[15] Kirschner, M.: When Shall Gallstone Disease Be Operated Upon? *Zentralbl. f. chir.* 51:83, 1924.

[16] Flint, E. R.: Observations on Gallstone Cases. *Lancet*, 1:187 (Jan. 28), 1933.

[17] Wilson, W. D.; Lehman, E. P., and Goodwin, W. H.: Prognosis in Gallbladder Surgery. *J. A. M. A.*, 106:2209, 1936.

[18] Branch, C. D., and Zollinger, R.: Acute Cholecystitis. A Study in Conservative Treatment. *New England J. M.*, 214:1173, 1936.

[19] Taylor, F.: The Acute Gallbladder. *Surg., Gynec. & Obst.*, 63:298, 1936.

the pathological diagnosis. It seemed desirable in a study of this kind to include those cases which appeared clinically acute as well as those which were acute on tissue study. Therefore, our series includes (1) all those cases which had the clinical picture of acute gall bladder whether or not subsequent events confirmed this diagnosis, and (2) all those cases which clinically suggested a chronic form of disease but which at operation, tissue study, or autopsy proved to be acute gall bladders.

There were 129 such consecutive admissions to the two hospitals in the 10-year period from 1925 to 1935. These cases were then classified into three groups:

(1) Acute edema of the gall bladder, of which there were 40 cases.

(2) Acute suppurative gall bladder, 60 cases.

(3) Gangrenous gall bladder, 29 cases.

The purpose of this classification was an attempt to catalog those types of acute gall bladder which in general have the same outcome. Thus a gall bladder showing only an acute edema with a minimal inflammatory process might well be expected to subside. On the other hand a suppurative or gangrenous gall bladder may very likely lead to complications. It would also be of great importance from a clinical standpoint if this differentiation could be made for then the cases with acute edema could be treated expectantly while those with a suppurative or gangrenous gall bladder could receive prompt surgical care.

DIAGNOSIS

Unfortunately no such clear clinical differentiation could be made. Many patients with the most extreme signs and symptoms had only a hydrops of the gall bladder. The reverse was also noted in our cases where a gangrenous or even ruptured gall bladder produced only the very mildest of signs and symptoms.

In the last analysis, the white blood count and differential plays an important part in determining the clinical diagnosis. Upon this largely depends the decision whether the lesion is a benign one which may wait for surgery or one which most certainly will not subside if a course of watchful waiting is followed. However, in the present series, the white counts and differentials bore no relation to the lesion or were misleading in 10 per cent of the cases. The average white count and differential for the relatively benign acute edema group (Group No. 1) was 12,500 and 77.8 per cent polys, while that for the potentially dangerous acute suppurative group (Group No. 2) was 15,200 and 80.5 per cent polys. It is obvious that with these slight differences there must be marked overlapping of the counts of the two groups. It would be dangerous to base the diagnosis upon the blood count alone.

Thus it is seen that however clear-cut the pathological diagnosis from tissue study may be, an accurate clinical diagnosis is often quite impossible. This point will be referred to later.

RESULTS—MORTALITY

In considering the mortality rates, we will consider the entire series of 129 cases including those mild lesions found in the first or acute edema group. Also included are those cases which recovered and were discharged without operation. It would obviously give a false picture if those cases which ran perfectly typical clinical courses were dropped because pathological tissue diagnosis was not made. There were 23 such patients who recovered without operation.

In the entire series there were 21 deaths, a mortality of 16.3 per cent. This figure speaks for itself and requires no comment.

Following the division used by Zinninger[8] all the operated cases were divided into three groups in order to further analyze the mortalities. These groups consisted of (1) those cases which were operated upon within 48 hours of acute onset, (2) those operated upon 2 to 5 days after acute onset, and (3) those operated upon 5 days or more after acute onset. The results were as follows:

	Number of Cases	*Per Cent of Mortality*
Operated within 48 hours	19	5.2
Operated 2 to 5 days	20	5.
Operated 5 days or more	63	23.8

These figures are quite similar to those of other series which have been reported. Such a striking change in mortality is certainly significant. It should also be noted that in the above table there is nothing to suggest that the gall bladder must receive the same emergency treatment that is received by the appendix. The mortality is quite within reasonable limits through the fourth day after acute onset. After this, however, it rises to the alarming figure of 23.8 per cent.

Practically all deaths occurred in the more severe forms of acute gall bladder disease. It would seem advantageous to examine the acute suppurative and gangrenous groups, leaving out the relatively benign acute edema group. The results of this are shown graphically in Figure 1, and as might be expected show even a greater advantage to early operation.

Next, it is interesting to follow these same two groups of patients through the hospital, to see what happened to them. This is shown in Figure 2. In the first column are those cases which were operated upon within 24 hours of admission to the hospital. The mortality is quite high, 15.7 per cent. However, this is in part explained by the fact that these patients waited an average of 3.8 days after acute onset before coming to the hospital. They had become increasingly poor risks. In the center column (Figure 2) are those cases upon which it was decided to let the gall bladder "cool." These patients waited to be operated an average of 10.3 days. To what end? Eventually to be operated with a mortality of 24.3 per cent! Fourteen patients in these two severe groups were unoperated. Eleven recovered from the acute process and were discharged. Three died. These three unoperated

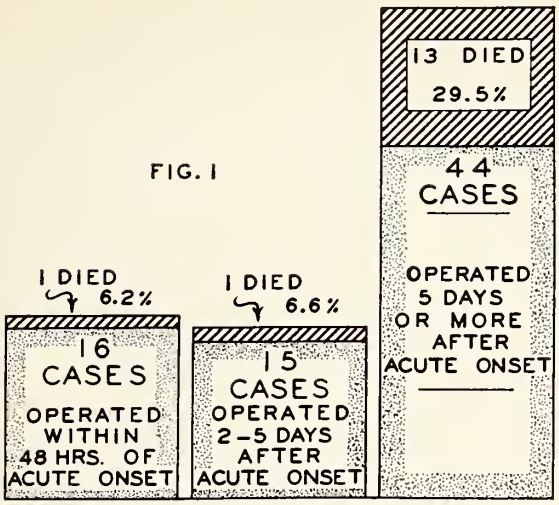


Figure 1. Operative results on suppurative and gangrenous gall bladders.

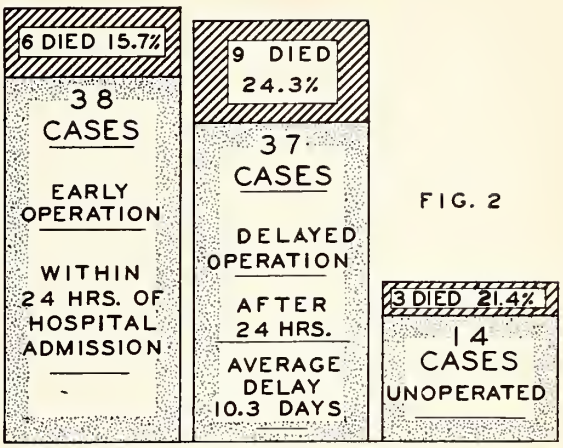


Figure 2. Disposition and results of suppurative and gangrenous gall bladders after admission to the hospital.

patients who died can in no sense be considered moribund and inoperable on admission. They lived in the hospital an average of more than three days during the "cooling" and watching process to which they were subjected.

COMPLICATIONS

It has been stated that complications following acute gall bladder disease are infrequent. It has also been said that the complications which do arise are not particularly serious. These contentions were not borne out in our series.

Complications of rupture, gangrene, or pericholecystic abscess were found at operation or autopsy in 28.6 per cent of the 129 cases. Certainly frequent. The mortality of those in which these complications were found was 30.8 per cent. Certainly serious.

Gross gangrene was present in 29 cases—an incidence of 22.5 per cent. The operative mortality on these was 29.6 per cent. Including unoperated cases, the general mortality for the complication of gangrenous gall bladder was 34.5 per cent.

A ruptured gall bladder was found in 13.2 per cent of the entire series. This complication carried with it the staggering mortality of 53 per cent.

From the foregoing it must be concluded that complications are by no means rare and certainly not benign. It is obvious that practically all the deaths were the result of complications. How, then, can the complications be prevented? There is but one answer—early operation before the appearance of pericholecystic abscess, gangrene, and perforation.

The acute gall bladder and the acute appendix have little in common so far as the pathological lesion is concerned. However, they are quite analogous when considering their complications. No one would raise a dissenting voice at the removal of an early acute appendix. Yet an uncomplicated acute appendix has never killed a patient. The danger lies not in the acute appendix but in the complications which arise from it. The patient dies as a result of those complications—perforation, peritonitis, pylephlebitis, etc. So it is also with the acute gall bladder. Admittedly the complications appear much slower, but nevertheless it is the complications of the acute gall bladder which kill the patient.

Judging from our own figures, those complications are more frequent (28.6 per cent) than in acute appendicitis and are much more serious (30.8 per cent mortality). What is the reason, then, for the removal of the appendix and not the gall-bladder?

TIME OF OPERATION

It was hoped in this study to determine just how early or how late the gall bladder could be removed without running too great a risk of the patient's life. Certainly there has been nothing to indicate that the gall bladder must be explored with the same dispatch that the acute appendix now receives. On the other hand, if the diagnosis of acute gall bladder is definite, no possible advantage can be hoped for in waiting. By further procrastination only more liver damage and complications can be expected. If the lesion proves to be one of edema, little harm is done by the operation. On the other hand a great risk is taken if a gangrenous or suppurating gall bladder is watched for several days, in the hope that it will "cool" or the diagnosis become more apparent.

Because it is so frequently the policy to observe these patients rather than give them prompt surgical care, some will be seen who have already perforated. These demand surgical interference as soon as possible after they have been first saturated with intravenous glucose solution.

Early perforation of the gall bladder is not common. In our series only two cases were observed in which rupture was present at operation as early as three days after acute onset. In those cases reported by Wilson, Lehman and Goodwin[17] there was one case which was found ruptured at the time

(Continued on page 415)

OBSERVATIONS ON THE PULSE PRESSURE IN CORONARY THROMBOSIS

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A thorough search of the literature has failed to reveal any previous discussion concerning the finding of an exceedingly low pulse pressure as a presenting sign in patients with coronary heart disease. It has been my opportunity to observe this phenomenon in two such cases in the past six months and the idea that forces itself upon one is that this is a possible sign to which insufficient attention has heretofore been paid.

The physiological and clinical significance of large pulse pressure has been thoroughly studied and put to diagnostic use. On the other hand nowhere, to my knowledge, is the clinical significance of low pulse pressure discussed or considered to any extent. Bringing this observation to the attention of others certainly seems justifiable since by being on the alert for its detection, others may help determine its true value by noting the frequency with which it occurs. Paul D. White[1] has only quite recently remarked, ". . . we have made more progress by the simple but concentrated study of quite ordinary symptoms and signs than by the use of the newer instruments, as important as they are. It is worthy of comment that the greatest advance of all in our study of cardiovascular disease has been in history taking and physical examinations and in simple observations of other nature, all possible hundreds of years ago, but neglected because no one took the simple step of devoting time intensively to them."

REPORT OF CASES

Case 1. *History:* A 60-year-old retired rural mail carrier on September 15, 1936, had as his chief complaint gaseous eructation and occasional dizziness with accompanying occipital headache. These symptoms had been noticed only during the preceding three or four days and had not increased any in severity. The gaseous eructation was present intermittently during the day and not especially related to the ingestion of food. The dizziness with dull occipital headache was said to be brought on by exercise, climbing stairs, walking up hill, or lifting, and would last one to two hours. No other symptoms relative to the cardio-respiratory system were noted. The past history revealed that he had received treatment for high blood pressure from his family physician during the past year. This condition he had been told was improving. Two years previously he had undergone a hemorrhoidectomy. There were no other serious illnesses or operations and his habits were said to be temperate. The family history was non-contributory.

Physical Examination: The patient was slightly overweight but otherwise normal appearing and in no distress. Temperature, 98.6; pulse, 80; respiration, 18. The skin was not remarkable. The head, ears, nose, and eyes were normal. Ophthalmoscopic examination showed normal appearing fundi. The only positive physical finding was the blood pressure which was recorded as 160/145 (both arms). Laboratory work showed normal urinalysis. The blood count was: red blood count, 5,000,000; hemoglobin, 85%; white blood count, 8,000, 80% polymorphonuclears. The Kahn and Wassermann tests on the blood were negative.

Progress of the Case: The patient was urged to have a gastro-intestinal series done but elected to postpone it. He was told to limit his activity, take regular rest periods and naps during the day and avoid completely all strenuous exercise, and to report back for weekly examination. Nothing further was heard from this man until the night of October 1 when I was called to see him at his home. Twenty minutes before my arrival, as he was entering the house, he had been seized with an excruciating substernal pain which radiated to his left elbow and he was asking only that the terrific chest and elbow pain be relieved. Examination at this time showed him to be in great distress and some shock. The skin was cold and clammy. Temperature, 98.0; pulse, 52, and weak and irregular; respiration, 22. The blood pressure was 155/130. The chest was negative except for slight dyspnea. The lungs were clear. The heart sounds were indistinct and very distant with many extrasystoles. No murmurs or other adventitial sounds were heard. Abdomen and extremities were negative. The ophthalmoscopic examination again was normal. Morphine sulphate gr. ¼ up to 1 grain within an hour and subcutaneous aminophyllin relieved the pain only slightly. The diagnosis of coronary thrombosis was made. The following morning the temperature was 100.1, the pulse 60 but still irregular, respiration 20 and blood pressure 140/105. The patient had little or no sleep the previous night although morphine gr. ¼ was given every four hours. The substernal and left elbow pains were still present, but less severe and described as a dull ache. The heart sounds were more distant and extrasystoles were present. No pericardial friction rub was heard. About 150 cc. of reddish urine was voided during the day and showed no albumen or sugar, but 15 red blood cells per high powered field. The blood showed a white blood count of 15,000 of which 85% were polymorphonuclears. Early the following morning the patient ceased to breathe, not, however, before I had arrived at his side. The exitus suggested ventricular fibrillation—a faintly heard racing heart beat and fibrillary pulsations in the neck veins. Permission for autopsy was not granted.

[1] White, Paul D.: The Study and Treatment of Heart Disease at the Massachusetts General Hospital from 1821 to 1936. *New Eng. J. of M.*, Vol. 215, No. 27, p. 1268, Dec. 31, 1936.

Case 2. *History:* A 45-year-old robust police officer on October 27, 1936, complained of an oppressive tightness about his chest and occasional dizzy spells. Three days previously these symptoms had their onset following the rather strenuous exertion (for this patient) of carrying several chairs up three flights of stairs. Until this time he had been in excellent health and reported no serious illnesses or operations in his past history other than an operation for anal fistula five years previously. The family history was negative.

Physical Examination: He was a slightly obese but well developed, normal appearing man of 45 and in no discomfort. Temperature, 98.6; pulse, 80; respiration, 18. Skin normal and head, ears, nose and mouth negative. Ophthalmoscopic examination of fundi revealed nothing abnormal. Chest and lungs were negative. The cardiac borders were difficult to make out on percussion, but there was believed to be no enlargement. The heart sounds were of good quality and the rate and rhythm were normal. No murmurs were heard. The blood pressure was 140/125 (both arms). Abdomen and extremities were normal. Laboratory work showed normal urine and the blood count was: red blood cells, 5,700,000; hemoglobin, 90%; white blood cells, 6,500, 75% polymorphonuclears. The blood Kahn and Wassermann were negative.

Progress of the Case: The patient was ordered to limit his activity which included being relieved from work for an indefinite period. He was placed on luminal gr. ½ three times a day after meals and theobromine sodium salicylate 10 gr. three times a day. He was asked to report for weekly examination. This he did with fair regularity, making possible several blood pressure readings prior to his coronary attack. November 7 the tightness of the chest and dizziness was much improved. Blood pressure, 140/125; pulse, 80. November 12 he complained for the first time of feeling his heart palpitate, i. e., "being conscious of its beating rapidly several times during the day." Blood pressure, 140/120; pulse, 78, and no abnormal heart sounds were heard. Rate and rhythm normal. He was ordered to bed and aminophyllin tablets gr. 1½ three times a day given in place of the theobromine. The morning of the 19th (twenty-three days after his first examination) he awoke with a severe attack of dizziness and considerable occipital headache. His blood pressure was 140/130. A nembutal capsule was given and he slept for several hours. At 3 p. m., while lying on his davenport, he was suddenly seized with a terrific pain in the left chest over his heart and stabbing, sharp, intense pain in the left shoulder joint. On examination he was somewhat dyspneic, perspiring freely and in great pain. Temperature, 98.6; pulse, 95; respiration, 23, and blood pressure still 140/130. The heart was rapid but regular and the sounds were distant and more indistinct than they had been at previous examinations. Morphine sulphate gr. ¼ was given up to a total dosage of 1 grain in one hour's time and the pain was described as still agonizing. Subcutaneous aminophyllin brought no relief. Morphine was continued every three hours with slight relief. A diagnosis of coronary occlusion was made. The patient was seen in consultation with a cardiologist eight hours after the heart attack. At this time the blood pressure was 118/75, the pain was still present but much relieved and the diagnosis of coronary thrombosis was confirmed by the cardiologist. With excellent nursing care, this patient is free from discomfort and any signs of cardiac decompensation eight weeks after the coronary attack. The heart sounds are good with occasional extrasystoles, rate of 80 beats per minute and no murmurs. No pericardial friction rub was heard at any time. The blood pressure following the attack was the follows: first week 125 95, second week 120/100, third week 130/100, at which reading it has remained stationary. The day following the attack, there was fever of 100.8 degrees and leukocytosis. There were red blood cells in the urine for four days. The temperature returned to normal on the fifth day.

COMMENT

In each of the above cases the low pulse pressure was observed at least two weeks prior to the actual cardiac accident—clinical coronary thrombosis. The chief complaints in the early histories were dizziness, some occipital headache and gaseous eructations, two weeks prior to the typical pain and characteristic symptomatology of an attack of coronary occlusion.

Physiologically the pulse pressure represents the force possessed by the left ventricular musculature over and above that needed to propel the blood through the vessels. Perhaps the lowering pulse pressure represents advancing myocardial damage which eventually culminates in the sudden coronary attack in certain cases of coronary occlusion. If so, a helpful sign is furnished by this lowering pulse pressure which may be the only one available to the general practitioner (unable to obtain a graphic record of the state of the myocardium through an electrocardiogram) and so guide him in directing the limitation of the patient's activity and when possible aid in the prevention of the miserable conditon of the actual coronary attack.

SUMMARY

(1) Two cases of coronary thrombosis presented low pulse pressure of 15 and 10 mm. Hg. from two to three weeks prior to the actual heart attack.

(2) The suggestion is made that this may be a helpful physical sign and others are urged to look for it and aid in determining its true value.

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AUGUST, 1937

EDITORIALS

VENEREAL DISEASE CONTROL

Syphilis and the other venereal diseases continue to be just as great a public health problem as they were a few months ago when the Indiana State Medical Association pledged itself to the Parran program of control. Many of us have felt that the matter was receiving very little official attention, but in this issue of THE JOURNAL is published a special article, "Indiana Proposes to Dispose of Syphilis," which disproves our fears and provides definite proposals and recommendations upon which individual physicians and county medical societies can start to work immediately. Some of our larger county medical societies already have gone into action on anti-syphilitic programs. Specific examples are seldom cited in these columns, but the rule is broken here to compliment the members of the Fort Wayne Medical Society for the excellent way in which they have handled the situation, for they did not wait for a starting signal, they made plans and proceeded to carry them out. Already, through public meetings and with the hearty cooperation of the local press, they have impressed upon the people of Fort Wayne and environs that this is a serious health problem. In South Bend the action has been vigorous, and propaganda has been loosed to convince the residents of St. Joseph County that the subject is a vital one, for when official reports were published showing that ten per cent of a large group of food handlers had definitely positive serologies, South Benders wanted to know more about it. Indianapolis is just getting started on its campaign which is outlined, as approved by the council of the Indianapolis Medical Society, in this JOURNAL. Probably other sections of medical Indiana have done things to start the ball rolling, but the fact remains that in too many quarters little or nothing is being done. Certainly it is more than a coincidence that in practically every section of the country where blood tests have been made upon large groups of people, the same findings are almost invariably found—ten per cent positive! If nothing more is done than to preach to the laity this idea of ten per cent, much can be accomplished.

Less than ten years ago, very few newspapers or magazines dared to mention the subject of syphilis, and the word was absolutely taboo over the radio. Today the lay press and magazines teem with the subject, and it is not uncommon to hear it frankly discussed on radio programs.

Verne K. Harvey, director of the Indiana State Board of Health, and his competent assistants, stand ready to put the whole machinery of their department into action whenever a request for help is made. Already they are formulating plans to cooperate with the United States Public Health Service. At the meeting of the board in July, the members of the board voted to supply drugs for the treatment of syphilis to small county hospitals where county medical societies wish to maintain free treatment clinics for the indigent syphilitic patients.

Lay organizations are desirous of having competent speakers on the subject of venereal diseases. Material may be obtained from various sources for the preparation of a talk suitable for presentation before almost any kind of an organization. The special number of THE JOURNAL (March, 1937) alone affords sufficient data for a half dozen or more talks that would command respectful attention if properly presented. Actually there are few medical subjects of more interest at the present time than the matter of venereal diseases. A rather limited inquiry as to the number of talks of this sort made before chambers of commerce in Indiana so far this year disclosed that just *one* talk had been made before the eight organizations which answered the inquiry. The comment on this one talk was that "the subject was very interesting, but it was evident that the speaker had made little preparation."

This problem is in the lap of Indiana physicians. It must not be lulled to sleep with a lot of sentimental nothings. We must recognize it for the vitally important thing that it is and *get into action* about it!

NEW FRONTIERS

One need not delve into the records of ancient history to illustrate the part medicine has played in the progress of civilization. A retrospect over fifty years would clearly emphasize the tremendous

strides that have been made in the conquest of disease, and the influence this has provoked for the betterment of the human race. Yet progress is a stern dictator and demands unfailing efforts. That medicine has not failed to keep step with the parade may readily be pictured in a backward glance over the past ten years. This recent decade has seen the victims of pernicious anemia saved from lingering death through its effective treatment with liver, liver extract, or ventriculin. Addison's disease, with its hopeless outcome, has yielded to the effects of the adrenal cortex hormone "cortin," in conjunction with a high salt intake. The red fire of St. Anthony has been extinguished by the successful application of erysipelas antitoxin and the use of ultra violet rays. Diphtheria fast approaches the category of rare diseases through the widespread inoculation and immunization of susceptible persons. Scarlet fever will no longer be so greatly feared since antitoxin is finding its place in common use and as immunization becomes more universal. The doubtful value of stock vaccines in whooping cough has given way to the favorable acceptance of Sauer's vaccine for prophylaxis and Krueger's vaccine for treatment. During the past decade convalescent serum for the prophylaxis of measles has come into fairly general use, and the recent introduction of human immune globulin, derived from the placenta, has proved a definite advance in the control of this disease.

In the field of endocrinology we have witnessed the transition from empiric to specific therapy. The discovery and proven therapeutic value of cortin, antuitrin-S, theelin, thyroxin, parathormone and insulin; the recognition of the pituitary gland as the key gland of this system; the establishment of the relationship of parathyroid tumor to bone disease; the synthetic development of male and female sex hormones, all have added to the immense total of progress in this branch during the past ten years. In the management of diabetes mellitus we have witnessed the change from low carbohydrate diets to those of higher values, and the development of protamine zinc insulin has reduced the necessity for frequent administrations. Fever therapy, diathermy, resection of the sympathetic ganglia and the use of the Pavaex machine have all contributed to the treatment of Buerger's and Raynaud's disease, where previously only general therapeutic measures were employed. Hyperpyrexia has definitely established itself as a curative measure in many of the complications of gonorrhea, and as a helpful measure in those of syphilis.

Undulant fever was infrequently recognized as a disease of humans ten years ago, but today it is readily diagnosed through a specific blood test.

In tuberculosis we have seen the addition of collapse therapy and phrenecectomy return many to gainful occupations. The use of lipiodol, bronchoscopy and diagnostic pneumothorax have increased our knowledge of pathologic conditions in the bronchi and lungs. In respiratory failure, the Drinker respirator has proved its great value in sustained respiration.

The symptomatic treatment of pneumonia has given way to the accurate typing of the pneumococcus and the early use of specific serum therapy, oxygen and diathermy.

The unfortunate migraine victims are now relieved through the use of ergotamine tartrate. Brain tumors are now accurately diagnosed and localized with the aid of ventriculography and encephalography, and their mortality greatly reduced through improved surgical management. Epidemic lethargic encephalitis has been shown to be caused by a virus, and a better knowledge of its sequelæ and treatment established. Dementia præcox has risen from the hopeless classification to one of sanguine expectation through the brilliant results secured, particularly in early cases, by insulin shock therapy. Myasthenia gravis has been helped therapeutically with the use of prostigmine.

The introduction of benzedrine sulphate has been a distinct advance in the treatment of narcolepsy, general muscular weakness and hypotension. The recognition of agranulocytosis as a disease entity has come and been followed by its corelationship to the use of amidopyrine and barbiturates. The use of pentnucleotide has already reduced the mortality of agranulocytosis from 65 to 25 per cent. Tularemia, psittacosis, and the black widow spider bite were unrecognized a decade ago. Advances in cardiology, nephritis, arthritis, the anemias and malnutrition stagger one in contemplation of such progress in so short a time. Urinary infections are yielding to the use of mandelic acid, and more recently to the use of sulfanilamide, where but a short time ago the alternation of acid and alkaline therapy still held preference over a heterogenous mass of various urinary staining dyes and chemicals. Vitamins have risen from the chaos of inaccurate knowledge to the place where vitamins B and C have been isolated, crystallized and synthesized, and vitamins A, D, and E are available in concentrates of high potency. The application of these factors to clinical conditions has increased in value with additional knowledge.

Chemotherapy has recently come to the front with the introduction of sulfanilamide and its use in beta-hemolytic streptococcic infections. Additional favorable reports of its value in gonorrhea, meninigitis and urinary tract infections open up a new field of chemotherapy which has not had such an impetus since the introduction of arsphenamine by Ehrlich.

One could go on indefinitely enumerating the advances in medicine in the short span of ten years. But why speak of ten years? The book of medicine has no end. Each day a new phrase, another sentence, an additional paragraph a brilliant chapter is completed, yet each chapter re-

mains but the preface to new discoveries, innovations, modern trends and neoteric ideas, all adding to the sum of human progress. The last word can only be written in eternity.

THAT BIRTH CONTROL PROGRAM

The question of birth control has been a pertinent one for a good many years. Social economists long have recognized the fact that large families usually are found among those classes of people least able to care for large families. The problem of undesirable progeny, particularly of those mentally afflicted, among epileptics and hosts of similarly handicapped groups, has been a moot question. Within recent years, various organizations have sprung up with the purpose of disseminating knowledge on the subject of birth control, and some of these organizations have had more than a semblance of merit.

A recent court decision gave courage and support to birth control organizations; the decision indicated that there was nothing illegal in the distribution of such information as might tend to produce some degree of control in the matter.

The Catholic church, long an opponent of any measure that would in any way limit offspring, remains adamant. Consider, for example, the rule in all Catholic hospitals to the effect that termination of pregnancy by other than natural means is entirely without the pale. In these hospitals, surgical interference is not permitted in tubal gestation until rupture occurs, and the position is taken that the end does not justify the means; we are advised that this position is assumed because of a recorded case of natural birth in a tubal pregnancy. It is, then, only natural that the Catholic hierarchy should oppose any and all contraceptive methods. However, with the people in general it becomes a different matter. Economic conditions have become such that large families are burdensome and anything that seems to afford some measure of control is willingly accepted. Our druggist friends tell us that the sale of contraceptive ointments and devices has increased several hundred fold within the past few years. Much of this, of course, is due to the publicity that has been given the subject in the lay press. We have been approached by manufacturers who want to advertise contraceptive products in our medical journal, and now that the American Medical Association has looked even a little favorably upon the subject, we may expect soon to see this advertising material in the medical press.

Much misinformation is abroad concerning the action of the House of Delegates at the Atlantic City session, for press dispatches pointed out that the Association was giving unreserved approval to the subject of birth control when, as a matter of fact, the House of Delegates merely placed the whole matter before various Association departments which are to make a thorough study of the whole subject together with rigid investigations of various materials, methods, and devices now proposed.

Properly exercised, birth control can be a great force for good, and there is dire need for some method by which we can be assured that children will not be born when it is morally certain that they will become public dependents if not public menaces. It is too much to hope that the bearing of children ever will be a planned event, an event that is as carefully looked after as is the propagation of blooded live stock; however, much can be done to improve human strains, and that, we believe, should be done.

DOCTORS AND HANDWRITING

We would be the last to claim that the handwriting of a physician is a matter of first importance, but there are times when it seems it would be a little bit safer and more convenient for others if doctors would try to write in such a way that their words can be read. A prescription that looks like a problem in cryptography is sometimes a definite menace to the life and health of the patient.

Recently we heard of a case in which a physician prescribed "caffeine 5 grains," but had it written so that the nurse read it as "codeine .5 grains." The patient needed stimulation and was seriously endangered by the narcotic. Such a mistake seems impossible, but the handwriting of some physicians is pretty bad.

There are a great many other reasons why the thoughts of a physician may need to be perpetuated in such a form that those who come after may be able to read them. Recently the Division of Public Health has been sending out duplicate birth certificates to the mothers who have borne children. In a large percentage of cases these certificates are practically illegible. A birth certificate that is so badly written that it cannot be read is practically worthless for the reason that it cannot be filed and, therefore, it cannot be found at a later date when it may be needed. It is extremely important that the information on birth and death certificates be correct, and physicians should take particular pains to be sure that the name is properly spelled, and that the names of the parents are properly spelled and legibly written, as well as the address of the family and the county from which the certificate is submitted. All of these things should be accurate. The name of the disease of which the patient died must be written in a manner that can be made out, else the certificate is worthless.

In case an individual has never learned to write in a way that can be read, he should either print this information or write it out on a typewriter. Practically every reason for making out a certificate is just as important a reason for making that same certificate legible.

EDITORIAL NOTES

HAVE YOU MADE YOUR RESERVATIONS AT FRENCH LICK? IF NOT, DO IT NOW!

It is hard to fathom the resolution presented to the A. M. A. House of Delegates at Atlantic City by the State Medical Society of New York. It would seem to commit the medical profession to a policy of Federal subsidy, an entering wedge that very likely would have arisen to smite us many times in the future. We are more than pleased that the House gave it the thumbs down.

In a little more than two months, the annual convention at French Lick will be in session, a meeting that promises to eclipse any similar event held in southern Indiana. Every doctor we have met seems to be making plans to attend that meeting. Pleasant weather conditions are assured in early October. Hotel reservations are being made in large numbers, we are advised, but if you have not made yours, that little matter should be taken care of well in advance of your arrival, so do it now!

Last month we directed attention to a man reported to be calling upon physicians and seeking to do instrument repair work and later neglecting to return instruments taken for repair. Just the other day we were circularized by the publishers of a so-called exclusive directory, warning us that unauthorized solicitations were being made in behalf of their publication. A good rule to follow is to say "no" very decidedly to any and all solicitations which involve a financial outlay until investigation proves them to be meritorious.

Morris Fishbein, editor of *The Journal of the American Medical Association*, has "arrived," for he has made the front cover page of *Time* (June 21st). He also rated a lot of space in the "Medicine" department of that news magazine in connection with its report of the A. M. A. meeting in Atlantic City. In general, we found *Time's* article a little disappointing—not that we disliked what was said, but the content did not seem to agree with the published records of the doings of the House of Delegates.

A new "digest" is on the market. This time it is a little magazine published by the J. B. Lippincott Company under the name of *Digest of Treatment*. It is of convenient pocket size, seems to be very well edited, and the contents of the first number are found to be very readable. The ten departments have individual editors with George E. Rehberger, M.D., as general editorial advisor. Compact, broad in its scope, *Digest of Treatment* undoubtedly will be well received.

Once more we congratulate the Indianapolis Better Business Bureau upon an issue of its *Bulletin*. The June, 1937, issue is devoted almost entirely to medical frauds and includes rather complete information on Marmola, "radium belts," optical swindlers, Dr. John R. Brinkley and his Formula No. 1020, Emerick's diabetes cure, Konjola, Manikin Tea, Neet, and Pinex. Ethical advertising is being forced upon patent medicine manufacturers. Exaggerated, misleading and untrue claims must be omitted from advertising on packages.

Recent changes in the wording of malpractice insurance policies have resulted in some revisions in the coverage that physicians have. In this issue (on page 406) appears an article by Mr. Albert Stump, attorney for the Indiana State Medical Association, in which he discusses in detail the coverage of malpractice insurance. Every physician should read the article carefully, for it contains much valuable information, and every physician who purchases malpractice insurance should read his policy studiously. It will be time well spent.

In the rural sections immediately adjacent to large cities, the dog question is one of magnitude. This is due chiefly to the fact that many city folk tire of the care of these household pets or find the natural increase in progeny more than they want to take care of, and the dogs are taken into the country and turned loose. Occasionally such dogs "gang up" into formidable packs and eke out a living at the expense of the farmer. We are wholly in accord with regulatory measures concerning our canine friends.

The Indiana State Medical, Dental and Pharmaceutical Association, a group of Negro professional men, held its annual meeting in Gary a short time ago. This organization has been carrying forward a rather pretentious program for several years. Naturally limited as to members, the association is a live one and the program they had arranged was creditable indeed. The reports of

cases, papers and discussions presented, the evidence of highly scientific interest, and the attention accorded all speakers were evidences of a high class professional conference.

In reading of the passing of John D. Rockefeller, most people directed their attention to the great wealth amassed by that interesting national character; others were attracted by the extreme age of the man; few thought of what he did for the medical profession and numerous others through the Rockefeller Foundation. Seldom has the profession had occasion to criticize the Rockefeller agencies for any infringement of our "rights." On the other hand, Rockefeller was a stanch believer in the advance of medicine and did much to further its interests. Certain other foundations might well emulate his example.

The Atlantic City session of the American Medical Association in many ways was very unusual. Seldom has there been a meeting in which the press of the nation showed such great interest. Several metropolitan newspapers covered the entire session and sent their crack reporters to do the work. Judging from newspaper clippings, we believe they did a creditable job of it. The House of Delegates came in for an unusual round of business with special and executive sessions. So great was the grist that some time will be required to digest the various matters that came before the House, some of which will be discussed in future issues of THE JOURNAL.

If proof were needed that the National Conference of Social Work is definitely in favor of socialized medicine, it is given through the award of a prize to Dr. John A. Kingsbury for his vitriolic address presented before the conference's national assembly in Indianapolis recently. The Pugsley award has been given to Dr. Kingsbury for "the year's outstanding contribution to the literature of American social work," and the Editorial Committee of the National Conference of Social Work, which made the award, unanimously favored Dr. Kingsbury's paper. Announcement of the award comes from the Publicity Department of the National Conference of Social Work and quotes portions of Dr. Kingsbury's article which condemn the American Medical Association and calls upon social workers to align themselves "against the entrenched officers of organized medicine." Who wants more proof?

In the past, we (the medical profession) have kept very quiet when insurance was offered to our patients. Insurance was a mortgage on future earnings which was to be collected at death. Then we watched the growth of the idea of buying a home through a term of years—another pledge of future earnings. Then came the great flood of installment buying. Necessities and luxuries alike were purchased by pledging future earnings. Charge accounts were urged as being better than cash. During all this buying, we, the doctors, have not taken the time or trouble to say to our patients that something should be put aside for the time when we would be needed. The harvest of all this neglect and thoughtlessness is the present urge to let the taxpayers take over and run our profession.

Charles Gordon Heyd, retiring president of the American Medical Asosciation, deserves the praise of every member of the medical profession in this country. Stepping into the office after the death of the lamented James Tate Mason, he carried on the multifarious duties of his important office in a manner very gratifying to his host of friends. Dr. Heyd managed rather thoroughly to cover the country, lending to various audiences his pleasing personality. He possesses the happy faculty of saying the right thing at the right time. Long a student of medical economics, and possessing and having an extraordinary talent for expressing himself, he "caught on" with every group with which he met. We have had the pleasure of meeting the man on several occasions during his term of office and have catalogued him with that select group which we have labeled "Worth While Doctors Whom We Have Known."

It is estimated that more than 1,250,000 people will tour the country this year via the trailer route. Enthusiasts say that a half million trailers will be in use ere the summer ends, which means that there will be some two million folk gallivanting about the country, most of them going nowhere in particular, and most of them proving to be more or less of a menace in that they constitute a sanitation problem. Despite intelligent, concerted action by our boards of health, the problem still remains a problem. Human waste and garbage, even in trailers provided with chemical closets, continue to be menaces. Added to this is the peril to trailer occupants which results chiefly from the use of improper food and contaminated water. There is an unbelievable number of folk who continue to believe that clear water is good water. Only recently we heard a pair who had just returned from a long trailer trip remark that they were careful about the water they used for they preferred to get it from running streams and

felt that if the water was clear, it was safe to use. We shall watch with much interest the efforts made by our health authorities to exercise some degree of control in this important matter.

It is very seldom that a physician is thanked for giving advice which is unpleasant and displeasing to a patient. We are reproducing here a letter which an Indiana physician received from an anonymous patient only a short time ago. As the physician himself says, this one letter compensates him for innumerable times that he has been bitterly condemned for giving similar advice to patients who have consulted him in a venereal clinic. The letter follows:

"Dear Doctor:

"About a year ago I asked your advice concerning marriage with a young man who was then, and I suppose still is, receiving treatment at your clinic. I knew all the facts of the case, but felt that if there was any chance at all of complete recovery, I was willing to wait. You gave statistics on this particular kind of disease and told me that an absolute cure, in this case, was very doubtful and, due to the fact that the brain had been affected, a recurrence was not improbable. You told me the best thing I could do would be to find someone else and forget this young man as far as marriage was concerned.

"That very night I told the young man that I thought under the circumstances we had better forget any plans for the future and, while we had no reason to be angry with each other, the best thing for us to do would be stop going out together. It was the hardest thing I ever had to do because I believed that I did care greatly for him. But your advice was too sincerely given to disregard.

"Since then I have met a young man of good character who comes from a good family. He is clean and fine, Dr. ———, and I shall marry him soon. I can never thank you enough for the time you gave me when you talked to me as you did. Even outside the fact that the first young man was diseased, I know now that I never really cared for him the way I do my husband-to-be.

"You saved me from a dreadful mistake and probably a lifetime of misery. If everyone would listen to your advice which you give so readily and convincingly, I'm sure many young people would be kept from a lot of sorrow.

"I repeat, Doctor, I want to thank you a thousand times and over because I probably owe my life's happiness to you. You asked for no names when I called upon you, so that is why I shall leave this unsigned."

Dr. Dave Sugar has written an editorial in the July *Detroit Medical News* entitled "Five Little Books" and the five little books referred to are the sex education booklets prepared by our own Dr. Thurman B. Rice. The editorial is reprinted verbatim:

"Through the kindness of W. W. Bauer, M.D., Director of Health and Public Instruction of the A. M. A., we looked through these five little books by Thurman B. Rice, M.D. These are sex education booklets issued by the A. M. A.

"The titles are:

The story of Life. For boys and girls of ten years.

In Training. For boys of high school age.

How Life Goes On and On. A story for girls of high school age.

The Age of Romance.

The Venereal Diseases.

"Dr. Rice, Professor of Bacteriology and Pathology, Indiana University School of Medicine, has produced the best work of this kind we have seen. A father of five children, he writes in the language children understand, he must have had many of the matters discussed put to him as questions by his own children. Besides his medical training and teaching experience, Dr. Rice has professional background in biology.

"The first three of these books pertaining to instruction of those of high school age and younger are particularly timely now, since by law sex education is to be given in public schools.

"*The Story of Life* for ten-year-old boys and girls is remarkable. The simplicity of wording achieves beauty of writing. Developmental biology is outlined, the reproduction and development of plants and birds and animals are recounted. This discussion is extended to human biology. We quote briefly:

"'As we have traced the story of the various animals from the lowest to the highest, we have noticed that more and more care is given to the egg and the young. Some of the fish produce millions of eggs and then leave the tiny baby fish to take care of themselves, and nearly every one of them is commonly eaten by some larger fish or bird. The higher animals produce only a few young and then take the best care of them. Best of all is the group of animals to which we human beings belong. Usually only one baby is born at a time, and then there is a great to-do about it so that everything will be just right.'

"We believe every doctor and every nurse and every parent, and every teacher in the public schools would want a set of these booklets if they could but leisurely thumb through them.

"The set of five sells for $1.00.

"Were the first of these books given children at the age of ten, and the successive ones made available to the later age groups, some of the tragedies resulting in scarring of body and soul of youngsters, *and their babies*, would be avoided.

"We wish these books were available to everyone.

"Dr. Rice has done a fine job."

INDIANA PROPOSES TO

Principles Recomended by State Committee

In a program which has as its goal the elimination of syphilis, two agencies must necessarily work in a spirit of cooperation. These two agencies are the Medical Association and the Department of Health, which includes the State Board of Health and its subdivisions or the health provinces under its supervision.

Publicity and propaganda dissemination should be entirely directed through the health department. This, however, should be done with the entire approval of the state and local medical associations. No doctor, as an individual, can conduct his own publicity. However, a health department can do this without stigma to the medical association or to its individual members.

Second, the health department and county medical society can be of infinite aid to the general practitioner in the ferreting out and diagnosing of cases of syphilis. It is easy to see that ample laboratory facilities will be necessary.

Third, the health department may exercise its police power in effecting treatment in the office of the private practitioner. From the viewpoint of the general practitioner, treatment should always be conducted in his office. If the patient is able to pay for treatment, he should do so. If he is unable to pay, then the state board of health should supply the drugs to the physician. (The supplying of drugs for indigent cases has already been taken care of by the state.) By this method a doctor does not lose direct contact with his own patient and the patient himself will enjoy the care of a man who has given due consideration to his case. If indigent practice in a community becomes so heavy that it is no longer feasible to handle it privately, then a well established clinic may take over the indigent cases. As many as possible of these clinic directors should be full-time men. The relationship between the medical society and this man will be one of accord under such an arrangement.

PUBLICITY CAMPAIGN

Since publicity is the essence of salesmanship, it is the opinion of this committee that a very large state-wide committee be appointed. This committee should consist of a physician duly appointed by each medical society in the state of Indiana. It should also consist of every health officer in the state. In addition to this committee, which shall be known as the "state-wide committee," sub-committees shall be appointed by the state committee members. These sub-committees shall function in the communities in which they exist. It would be well to have in the membership of these sub-committees heads of hospitals, heads of nursing associations, social service workers, such as the head of the Community Fund, Boy Scouts, Girl Scouts, young Hebrew Association, the Y. W. C. A., Y. M. C. A., Catholic lay organizations, etc. The larger each committee becomes, the greater will be its salesmanship ability in the community. These committees would be able to carry out the plans advocated by the state-wide committee.

Since publicity should be in the hands of the health department, it would be the duty of the state board of health to call the large state-wide committee into session and outline to them the definite plans which have been worked out by the medical association, through its committee for the control of syphilis, and the State Board of Health. The state committee can place in the hands of the sub-committees valuable information to be distributed in their communities. Through the agency of the state committee members (doctor and health officer) in the community, public meetings can be held with the sub-committee as a nucleus of attendance. Films, exhibits in the nature of poster displays, etc., can be obtained from the state board of health.

A large state-wide committee and sub-committees in the different communities as defined above could be instrumental in spreading much information throughout the state.

POINTS TO BE CONSIDERED

1. That a definite system of reporting cases be worked out.

2. That investigators be appointed for certain health provinces or groups of health provinces, to aid the physician in seeing that his patient concontinues treatment until his case is dismissable as cured or permanently arrested.

3. That the general medical profession and the boards of health be informed that syphilis is a quarantinable disease, and that people afflicted with the disease refusing treatment be quarantined.

4. That cards be printed by the state board of health for the use of physicians to report delinquencies in treatment.

5. That upon receipt of a card from a physician stating that a patient is delinquent, it shall be the duty of the health officer or his duly authorized deputy to visit the patient and insist upon his or her treatment or quarantine.

6. That a method of quarantine be made available for people who are infectious or are delinquent in their treatment.

7. That hospital beds be provided for patients needing hospitalization.

8. That the practice of supplying drugs for indigent patients be continued by the State Board of Health through the attending physician.

(Continued on page xxi)

DISPOSE OF SYPHILIS

Indianapolis Program Gets Under Way

The Council of the Indianapolis Medical Society has approved a plan formulated by Dr. Frank M. Gastineau and Dr. Norman M. Beatty for controlling syphilis in Indianapolis.

In surveying the syphilis situation at the Indianapolis City Hospital, the addresses of all new cases that appeared at the City Hospital clinic this year were charted upon a map. A study of age, race, and occupation of these patients was made, and a distinct effort is being made to trace the sources of infection. As a result of this study, numerous ideas have occurred which may help to solve the syphilis problem in Indianapolis and in other cities. One objective is: *No child born with syphilis in Indianapolis by 1940!*

To accomplish this, the following suggestions are made:

1. Regular examinations for syphilis in all known prostitutes must be made at regular intervals. If this is done by a private physician, a check should be made with the health department.

2. All street walkers, when arrested, should be checked at the city hospital.

3. Isolation of all female cases of the prostitute type when infectious state exists is essential.

4. Wassermanns should be made on all pregnant women, especially those attending clinics supported by public money.

5. Because many food handlers are found to have syphilis, it is advisable that Wassermann tests be made on this group. This could be done by private physicians or, if the individuals are in the low income group, the work could be done at the city hospital.

6. In the survey (mentioned above) it was found that syphilis is much more prevalent in the colored than in the white people, and it is believed that colored physicians should be able to handle the greater per cent of syphilis cases occurring in their own race. It is suggested that the Board of Health conduct an intensive course on syphilis with clinical material and laboratory demonstrations for the Negro doctors.

7. There is no dark field available among Negro physicians; some method should be formulated so that dark field examinations will be available to this group.

8. The clinic should be used as a clearing house for diagnosis and problem cases rather than for routine treatment.

9. Spinal puncture after one year of treatment should be done at the city hospital clinic for clinic patients and the same service should be available for the physician's low income group of private patients. Report must be sent back to the private physician.

10. A system to be evolved which will permit the private physician to report his wayward, noncooperative, contagious cases to the health department and perhaps to the hospital department, so that social service workers may investigate the cases.

11. Antisyphilitic drugs should be purchased cooperatively by the Board of Health for any physician in good standing, the drugs to be delivered at cost, thus taking the excess profit out of syphilis.

12. The Indiana State Board of Health should contact the physicians who are not members of the local medical society, explaining the modern way of diagnosing and treating syphilis.

13. The press should be notified of the campaign on syphilis and kept advised of the progress of the campaign.

14. Prosecutor and judges should be asked to help in correlating a system for treating the wayward group of individuals infected with syphilis.

15. Because it is important that public health officials have accurate knowledge concerning the prevalence of syphilis and particularly the incidence of new cases, the following plan (the Pennsylvania system) is suggested:

(a) Postal cards of the permit type with postage to be paid by recipient (in this instance, the board of health) should be supplied to all physicians.

(b) Physicians are instructed to mail a card whenever treatment of a new case is begun.

(c) The card shall contain no names or addresses. The doctor shall report the name and address by personal letter if the patient refuses treatment or refuses to cooperate in safeguarding the public from his disease.

(d) The doctor shall report by personal letter the source of the infection if possible.

The above plan will be more universally accurate if the personal equation is omitted. This plan has proved very popular in Pennsylvania.

16. Certain occupations, such as taxi drivers, chauffeurs, etc., could be handled after the program gets under way.

17. Car fare should be supplied for indigent prenatal cases.

18. Where clinics are supported by public money, the plan of treatment recommended by the committee on the Cooperative Clinical Studies in the Treatment of Syphilis should be followed as closely as possible.

19. Letters should be sent to congressmen, if the program is successful, to show that physicians as free individuals can do a good job of preventative medicine without the strong-arm of the Federal government interfering. By this example, we may ward off encroachment of the Federal government into our private practice.

COME TO FRENCH LICK —

FRENCH LICK CONVENTION
INDIANA STATE MEDICAL ASSOCIATION
October 4, 5, and 6, 1937

CONDENSED PROGRAM

MONDAY, OCTOBER 4

Registration in convention hall.

Annual golf tournament. Eighteen holes, low gross and handicap medal play, Hill Course, French Lick Springs.

Golfers' and trap shooters' luncheon, French Lick Springs Golf Club.

Council meeting.

Annual trap shoot.

Meeting of House of Delegates.

Annual dinner meeting for women physicians.

Buffet supper, smoker and stag party. Award of golf and trap shooting prizes.

Entertainment for women.

TUESDAY, OCTOBER 5

General scientific meeting, French Lick Springs Hotel.

Speakers to include:

Sumner L. S. Koch, M.D., Chicago.

Frank J. Heck, M.D., Rochester, Minnesota.

Jesse O. Arnold, M.D., Philadelphia.

Albert C. Furstenberg, M.D., Ann Arbor, Michigan.

Fraternity, class and ex-service men's luncheons.

Section meetings.

Annual banquet with speakers:

Irvin Abell, M.D., Louisville, Kentucky, president-elect of the American Medical Association.

Al Wynkoop, editor of the Lebanon *Reporter*.

WEDNESDAY, OCTOBER 6

House of Delegates breakfast meeting and annual election of officers.

Meeting of Council.

General scientific meeting, including the following speakers:

Joseph Brennemann, M.D., Chicago.

Louis Arthur Buie, M.D., Rochester, Minnesota.

Karl A. Menninger, M.D., Topeka, Kansas.

Bernard Henry Nichols, M.D., Cleveland, Ohio.

John S. Lundy, M.D., Rochester, Minnesota.

Frank H. Lahey, M.D., Boston, Massachusetts.



Air view of French Lick Springs Hotel

SOUTHERN INDIANA CHALLENGES!

Southern Indiana challenges the Indiana medical sports world. It is expected that the first prize for golf and the first prizes for trap and skeet shooting will go to Evansville at the annual meeting at French Lick in October. Dr. Robert Acre is planning to take his usual first place at golf and Dr. Chris Cullnane, who took the trap shooting honors last year, will be on hand to show those interested how to break twenty-five out of twenty-five at either trap or skeet. He has been busting them up regularly with a twenty-gauge Winchester pump this spring, but now has his twelve-gauge in top condition. It looks easy for him, but come and try to beat him! Mrs. Acre says she hopes they give the "cups" for booby prizes because she has too many of them around the house now!

OCTOBER 4, 5, and 6!



Golf

Get Ready to Play at French Lick

The lovers of outdoor sports and recreation are sure to get their fill at French Lick Springs during the 88th annual session of the Indiana State Medical Association on October 4th, 5th, and 6th. Those members who attended the 1933 convention at French Lick will recall the two fine eighteen-hole courses, commonly known as the Valley course and the Hill course, and the interesting nine-hole pitch-and-putt course.

The Valley course, located just one hundred yards from the hotel entrance, measures 6,300 yards in length with a par of 71. The general contour of the fairways is somewhat flat, making walking easy, and while it is considered a fairly easy course to play, high scores are not uncommon even with the more proficient players.

The Hill course, which is of championship calibre, is located two miles from the hotel and measures 6,500 yards in length from the short tees, with a par of 72. It is a Donald Ross creation and with its rolling fairways, and well trapped bent greens, is considered one of the most beautiful courses in America. It has been the site of many national tournaments and with a spacious club house located on the highest point, spectators may watch the play on many of the holes.

Another feature which is increasing in popularity with members of the Association each year is trap and skeet shooting. This was originally started at the 1933 French Lick convention and a tournament is now included in the entertainment program each year. The French Lick Springs Hotel, the convention headquarters, has recently completed a new trap and skeet field located on top of the hill just back of the hotel. A beautiful club house has been erected and without exception the field is one of the finest in the country. Phil Miller, a shooter of national reputation, is instructor at the club and will assist our committee in charge of the tournament. Two skeet fields are available and three traps for straight shooting, so members who enjoy this sport should not fail to bring their shooting paraphernalia with them to the convention.

The devotees of tennis, badminton, horseback riding and walking may enjoy themselves to the fullest as these facilities are also provided for at French Lick.



Skeet shooting

TAXING PROVISIONS OF SOCIAL SECURITY ACT

WITH REFERENCE TO LABORATORIES, SANITARIUMS AND PHYSICIANS

Operators of private laboratories, private sanitariums, and physicians employing one or more were advised July 1, 1937, by Commissioner of Internal Revenue Guy T. Helvering to make immediate tax returns as required under the provisions of Titles VIII and IX of the Social Security Act to avoid further payment of drastic penalties which are now accruing.

Every person employed in such work comes under the provisions of Title VIII, which imposes an income tax on the wages of every taxable individual and an excise tax on the pay roll of every employer of one or more. This tax is payable monthly at the office of the Collector of Internal Revenue. The present rate for employer and employe alike is one per cent of the taxable wages paid and received.

Under Title IX of the Act, employers of eight or more persons must pay an excise tax on their annual pay roll. This tax went into effect on January 1, 1936, and tax payments were due from the employers, and the employers alone, at the office of the Collector of Internal Revenue on the first of this year. This tax is payable annually, although the employer may elect to pay it in regular quarterly installments.

IMPORTANT

Actual money, when paid as wages, is not the sole basis on which the tax is levied. Goods, clothing, lodging, if a part of compensation for services, are wages and a fair and reasonable value must be arrived at and become subject to the tax.

Officers of corporations whether or not receiving compensation are considered employes for the purpose of taxation.

Wages paid during sick leave or vacation or at dismissal are taxable.

Exercise great care in filling out Treasury Forms SS-1 and 940. Directions are easy to follow and correct returns mean no unnecessary delay.

The employer is held responsible for the collection of his employe's tax under Title VIII, and is required to collect it when the wages are paid the employe, whether it be weekly or semi-monthly. Once the employer makes the one per cent deduction from the employe's pay, he becomes the custodian of Federal funds and must account for them to the Bureau of Internal Revenue. This is done when the employer makes out Treasury Form SS-1, which, accompanied by the employe-employer tax, is filed during the month directly following the month in which the taxes were collected. All tax payments must be made at the office of the Collector of Internal Revenue in the district in which the employer's place of business is located.

Penalties for delinquencies are levied against the employer, not the employe, the Commissioner pointed out, and range from 5 per cent to 25 per cent of the tax due, depending on the period of delinquency. Criminal action may be taken against those who wilfully refuse to pay their taxes.

The employers of one or more are also required to file Treasury Forms SS-2 and SS-2a. Both are informational forms and were due to be filed at Collectors' offices not later than July 31, covering the first six months of the year. After that they are to be filed at regular quarterly intervals. Form SS-2 will show all the taxable wages paid to all employes and SS-2a the taxable wages paid each employe.

Participation in a state unemployment compensation fund, approved by the Social Security Board, does not exempt employers from the excise tax under Title IX, Commissioner Helvering said. Nor does the fact that there is no state unemployment compensation fund relieve the employer of his Federal tax payments. In those states where an unemployment compensation fund has been approved, deductions up to 90 per cent of the Federal tax are allowed the employer who has already paid his state tax. These deductions are not allowed unless the state tax has been paid.

This tax is due in full from all employers in states having no approved fund. The rate for 1936 was one per cent of the total annual pay roll containing eight or more employes, and for 1937 it is two per cent. The rate increases to three per cent in 1938 when it reaches its maximum. The annual returns are made on Treasury Form 940.

An employer who employs eight or more persons on each of twenty calendar days during a calendar year, each day being in a different calendar week, is liable to the tax. The same persons do not have to be employed during that period, nor do the hours of employment have to be the same.

WHAT ABOUT THE COUNTY PUBLIC HEALTH NURSE?

JOHN W. FERREE, M.D.
Bureau of Local Health Administration, Indiana Division of Public Health

The physicians of Indiana will be asked, within the next few weeks, their opinions regarding the employment of county public health nurses.

In August the county commissioners make the budget for the next fiscal year and in September the county council makes the appropriations. The Indiana State Board of Health is offering counties financial assistance in providing for public health nursing service. The amount offered a county is based upon need.

Physicians may raise the following questions in giving their opinions as to the wisdom of a county spending public funds for a nurse:

1. What does a county nurse do?
2. What will be her relations to the medical society and to the individual doctor?
3. How much will the service cost?

What does a county nurse do?

She does the following:

1. Helps to secure early medical diagnosis and treatment for the sick.
2. Renders or secures nursing care of the sick. Teaches nursing care through actual demonstrations and then supervises the care given the sick by relatives and attendants.
3. Assists the family to carry out medical, sanitary and social procedures for the prevention of diseases and the promotion of health.
4. Helps to secure adjustment of social conditions which affect health.
5. Influences the community to develop more adequate public health facilities. She does this through all the appropriate channels of education.
6. Shares in any community action leading to betterment of health conditions.
7. Furnishes a nucleus about which all the community health activities may be coordinated and thus prevents duplication of efforts.

An actual report from a county nurse gives a good idea of the sort of thing she does:

"In a home where I was delivering a birth certificate the other day, I found a father who had been in bed for about ten days. He is a teacher.

"The man told me he was suffering with pleurisy and had great pain in his chest and back. He was coughing frequently and expectorating. I stressed the importanct of proper disposal of sputum and of complete bed rest and instructed the sister who is caring for the patient about boiling the dishes and caring for the bed linens.

"For some reason the man had lost faith in his physician and for several days had been under the treatment of a chiropractor.

"My problem now is seeing that the man takes the proper precautions and gets in the right hands for treatment. This, I feel, is a most important case to watch, not only because of his own family, but because of his close contact with the children in his classroom."

What will the nurse's relationship be to the medical society and to the individual doctor?

Each county nurse requests the county medical society to select for her from among its members a medical advisory committee of three to five members. She depends upon this committee for advice and guidance on all medical matters.

It is a definite and important part of the nurse's duties to find cases needing medical attention and to refer them to the family physician. While a nurse working alone in a county does not have time to indulge in much bedside nursing, she can, in her daily rounds, serve the doctors well by interpreting their orders to the family and teaching bedside technic to a responsible member of the family. She also is capable of improvising necessary equipment for the sick in the home.

It is well recognized by the Indiana State Board of Health that the physicians in some localities have in the past had none too happy experiences with county nursing service. We believe that this was the result of two factors. First, nurses who had no public health nursing training were employed. Second, these nurses worked alone, with little or no supervision or advice from trained personnel, and without working arrangements with the medical society. Both of these factors have now been eliminated. No nurse is approved for employment who has not met minimum standards of qualification. All nurses employed on public health funds receive expert consultant service and supervision from our Bureau of Public Health Nursing. This bureau sees to it that the nurse establishes satisfactory working arrangements with the medical society.

The annual budget for a public health nurse is $2,000, which includes $35 a month allowance for travel and $80 annually for incidental expenses. Unfortunately only an intangible value may be attached to much of the nurse's work. However, if we may believe experts who have studied the cash value of human life, some tangible evidence of her worth may be gained. These experts estimate the value of an infant at $5,000 and of a young adult at $12,000. If the nurse is only partially responsible for the saving of one life, she has more than paid for herself.

The State Board of Health sincerely believes that the county public health nurse has much to offer both to the physicians and to the general public. Whether or not her services are utilized will depend a great deal upon the expressed opinions of the medical profession. We feel that the forward-looking doctors of Indiana will give favorable opinions.

MEDICO - LEGAL

THE COVERAGE OF MALPRACTICE INSURANCE

By Albert Stump

Attorney for the Indiana State Medical Association

Companies engaged in writing insurance against liability of physicians for their professional services have evinced a purpose of generous construction of their contracts, so far as I know, wherever any reasonable questions of coverage have been involved. The nature of these questions has served to call their attention to the necessity of clarity in their policies for which they have obviously striven in changes and amendments made in the policies. Such changes as have come to my attention have been due to their entirely creditable desire to establish definitely what their liability is under their contracts.

Most of such contracts contain in large type a general statement of the obligations the company incurs. They now include the defense and the payment of damages in actions against physicians based on professional services rendered, or which should have been rendered. Although the company assumes the liability for the damages, it does not settle or compromise a suit or claim without the written consent of the insured. Insurance companies do not assume any responsibility either to defend or to pay fines which may be the result of criminal charges. In fact, any such insurance would be contrary to public policy and would not be permitted to be written. As to the liabilities under criminal statutes, the physician is individually responsible and cannot lawfully contract to avoid that responsibility.

When insurance against physicians' civil liabilities was first written, policies not infrequently insured against "mal-practice" without defining the term. But that left a wide twilight zone, where one could not definitely say whether the charge constituted profession malpractice or liability upon some other basis.

Malpractice has been defined as "unskillful practice, resulting in injury to the patient," and as compromising "all acts and omissions of a physician or surgeon as such to a patient as such, which may make the physician or surgeon either civilly or criminally liable." (Herzog's Medical Jurisprudence.)

Under that definition, a physician insured against liability for malpractice would be insured only against claims made upon him as a physician because of his treatment of a patient as such. Any act or omission which might not be connected definitely with the treatment, under the strict interpretation of this definition, would be beyond the coverage of that policy. But on the other hand, the term "malpractice" as applied to attorney and client has been used to denote "evil practice in a professional capacity," or "professional misconduct." (In re Rosenkranz, 94 Atl. 42.)

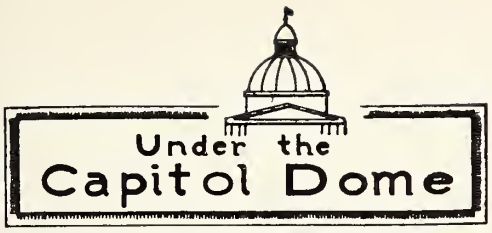
If this wider definition is followed, then malpractice can be understood to mean any failure of the proper performance of a duty, either to act or refrain from acting, incumbent upon one by reason of his being engaged in the practice of a profession. That could include the violation of a professional confidence—a matter which might not be involved in the treatment of a case. It could include also other conduct which might not be directly connected with the treatment of any patient but which conduct was a matter connected with the professional activities. As a further illustration — suppose a physician intentionally wrote prescriptions for narcotics, or himself dispensed the narcotics, solely for the purpose of satisfying the appetite of an addict. Such conduct could not be said to be malpractice in the sense that it constituted negligence in the treatment of a patient. Yet it would constitute malpractice in the sense of being evil practice in a professional capacity.

As such questions have from time to time arisen, the policies of insurance have undergone some revision with the purpose of removing ambiguity. The intention of the insurance company probably never was to go farther than to insure against claims based on professional services rendered or omitted, within the definite relationship of physician and patient as such. But in many states it is a rule of construction of insurance contracts that wherever it can reasonably be said that uncertainty or ambiguity exists, the uncertainty or ambiguity must be resolved in favor of the insured.

While the insurance companies have attempted to make as definite and certain as words can the intentions of the parties to the contract, the physicians and surgeons have generally received very liberal treatment from the insurance companies, even where the insurance companies had more than an even chance of avoiding liability if the question had been litigated.



YOUR LETTER RESERVING ACCOMMODATIONS AT THE FRENCH LICK SPRINGS HOTEL FOR OCTOBER 4, 5, AND 6 — THE ANNUAL CONVENTION OF THE INDIANA STATE MEDICAL ASSOCIATION



At a meeting of the State Board of Health held in Indianapolis, July fifteenth, Dr. Edmund Van Buskirk, of Fort Wayne, was made president, and Dr. Ernest Rupel, of Indianapolis, and Dr. J. C. Glackman, of Rockport, were reappointed as members of the board. A new member also was elected, Dr. William B. Wise, of Indianapolis.

The board voted to supply drugs for the treatment of syphilis to small county hospitals, where county medical societies wish to maintain a free treatment clinic for syphilitic indigent patients.

Trustees of Indiana University do not have the legal authority to charge to the township trustees of the state a part of the cost involved in caring for indigent patients referred to the Indiana University Medical Center by the trustees, according to an opinion of Omer Stokes Jackson, Indiana attorney-general.

After citing the laws under which the state accepted the hospitals, the attorney-general said: "It is clear from the language of the proposals incorporated in the first two acts above cited and from the act relative to the Riley Hospital that these institutions were established as charitable institutions and it was not the intention either of the donors or the legislature that indigent persons should be made to pay or that the township wherein they had established a legal residence should be charged for their care and treatment."

Floyd J. Hemmer, new superintendent of the Indiana State Farm at Putnamville, has announced that the universal application of a Wassermann test to all new inmates is being inaugurated at the institution. Necessary treatment in syphilitic cases will be administered. Complete data on tests and treatments will be kept at the state farm, Superintendent Hemmer said. Prisoners at the state farm are all short-term men.

Licenses of two Indiana physicians were revoked by the State Board of Medical Registration and Examination at its semi-annual meeting Tuesday, July 13, in the board offices.

In both cases the action resulted from Federal sentences for alleged violation of the narcotic laws. The physicians were Dr. Sidney J. Eichel, of Evansville, and Dr. Peter C. Berns, of Linton. Dr. Eichel was sentenced to serve three years in Federal prison, and Dr. Berns was given an eighteen-months Federal prison sentence.

VOICE OF THE DOCTOR

OUR DISTRICT SOCIETIES

Some of the district societies in our states are not as vigorous as they should be, and plans should be made to strengthen them.

Some states have very strong district societies, and if Indiana wishes to maintain its position as one of the most progressive and up-to-date state organizations, some thought must be given to this problem.

There are some county societies in Indiana which put on outstanding programs. The district societies of which these strong county units are a part, are very weak because they are overshadowed by the stronger county society. Upon investigation, it has been found that only three of our district societies have constitutions and two of these have adopted constitutions only within the last year. There is one district society, the Eleventh, which has been outstanding in its activities. It is well organized and is doing work that should be used as an example by other districts.

Many of our county societies have so few members that it is impossible for them to hold meetings, even monthly, that will attract enough of an attendance to be profitable to the members. The expense of putting on good educational programs is almost prohibitive.

Most district societies have been content to hold one meeting each year, or none at all. This means that the district practically does not exist except in name and is of no practical value to its members.

At the present time, medical society meetings are of great value to us as postgraduate work. A doctor who attends regularly his local society meetings should be given a program which will augment his medical education and keep him informed as to the latest advances in his profession.

The district societies over the state have a membership sufficiently large to make it possible for them to hold four or five meetings a year. That would increase the value of the society to the members. There is a feeling among the members who have the welfare of our state organization at heart that something should be done about this.

With one meeting a year in the district society, it is difficult for the president and other officers of the state association to attend the meetings. With several meetings during the year, the officers could arrange to attend at least one of the meetings with little interference with regular work.

In view of the above, it is suggested that:

1. Every district society in the state should have a constitution and by-laws.

2. Each district should hold at least four (4) meetings per year.

3. The district instead of the county society should be the unit to sponsor campaigns for health programs.

4. In the districts with one or more large and active county societies, the county units should make available through the district society their resources to aid the smaller county units. The numerous so-called academies and other medical societies that wean the interest of the physicians away from the regular county and district medical societies should be condemned. By this is not meant the annual meetings of such organizations as the Indiana Academy of Ophthalmology and Otolaryngology, but it does mean those local organizations within groups which divert the interest of the profession from the local county society and the district society. All of the profession's energy and financial backing should be given to the development of the district and local county medical societies.

5. This subject should be given careful consideration by all the members of the Indiana State Medical Association in order that a campaign may be launched to place the district society in the place which it should rightfully occupy in our Indiana State Medical Association.

WALTER F. KELLY, M.D., Indianapolis.

FRACTURES

An editorial in *Surgery, Gynecology and Obstetrics* states, "Progress and advancement in human endeavor and achievement have been accomplished only when the necessity for improvement is recognized and plans devised to bring a change." Many years ago the surgical profession realized the need for better diagnostic methods, a better knowledge of surgical pathology, and better technique in the application of surgical therapy. As a result of this understanding, elective surgery has made great strides in the application of all the principles involved in this branch of art. However, the intensive study has been confined almost exclusively to elective surgery, and the field of accident and industrial surgery has been sadly neglected, for it is doubtful if there has been any material reduction in the mortality and morbidity in this class of cases during the past twenty years or since the firm establishment of aseptic and antiseptic surgery.

Of the many questions in medicine none, to me, presents a more interesting situation than those under the title of fractures. As I view it, the term fracture has been in use for so long that when an injury is received, the fact that a bone is broken overshadows the other injuries present. As a result, the laity as well as the medical profession have become "bone conscious" to the detriment of what may be more important, the soft structure damage. Ages ago all fractures were handled not by doctors but by bone setters. It was beneath the dignity of a doctor to set a bone, comparable to the oath taken in which the aspirant to practice medicine took an oath not to "cut for stone." I am afraid that attitude is more or less present today as far as fractures are concerned. The public looks upon a fracture as a bone that has been broken and that all that is necessary is to grab the limb and pull, and the pieces of bone will fit themselves together, and all that is then required is to give it time to "knit." I wonder if that attitude isn't to some extent fostered or at least not corrected by the medical profession.

One should examine the part as a whole to accurately evaluate the damage done as to circulation, nerve injury, muscle injury, all of which are as important as the skeletal structure. In examining for injury to the circulation one should consider the venous as well as arterial. Discoveries made at the time of first examination of shoulder, arm or elbow injuries may reveal findings that would modify the ordinary treatment indicated for the fracture present, and be of inestimable value in defending a malpractice suit months later.

As the result of public instruction and first aid training by the American Red Cross and other bodies, the public as a whole is becoming not only more interested but is actually demanding the best recovery possible and will not adopt a very charitable attitude if the end result presents undue deformity, palsies or other type of marked impairment. Since the advent of the compensation law, the laborer has become "impairment conscious," and the attitude of some leads us to believe it amounts to a phobia. The insurance carrier who pays the bills by virtue of being the administrator of the funds, is confronted with not only the bill of the doctor and the hospital, but also the compensation for temporary total disability and permanent impairment. The doctor who is in attendance upon an injured workman has the double duty placed upon him of satisfying the injured party and the insurance carrier, and it has been my observation that in some cases he is unable to do either. Never before have the demands been so exacting upon the doctor to accurately examine and properly treat a fracture. To meet those demands, the doctor must prepare himself so that when a fracture does present itself, he will be in a position to find out just what is involved, the treatment indicated and its after care. The first operation, whether it be manipulation, open reduction or other procedure, does not terminate the treatment by any means; constant surveillance must be carried on, with the idea in mind of discovering any complication at its inception, such as infection, so that drainage can be instituted, decubitus so that pressure can be removed, circulatory obstruction so that it can be relieved, delayed nerve injury so that it can be evaluted and measures carried out for its relief.

In the Christian nations, babies are baptized, but supervision of their morals does not stop; likewise should the supervision of a fractured member con-

tinue after the first treatment. Any doctor who dislikes to treat fractures, or who feels that the task is too onerous, should call in an associate to help carry the burden. The civil court dockets in the United States contain many suits for alleged malpractice handling of fractures and there is some surcease to the defendant in the knowledge that he had the opinion and assistance of a fellow practitioner to help bear the load.

August F. Knoefel, M.D.

Terre Haute.

HOSPITAL STAFF PHYSICIANS

To the Editor:

At the Secretaries' Conference this year, there was a discussion to the effect that any hospital accredited by the American College of Surgeons or the American Medical Association must require physicians who are permitted to work regularly in the hospitals to be eligible for membership in the American Medical Asosciation. As I understand it, this is either an A. M. A. or American College of Surgeons ruling, and the purpose of it is to require all physicians who work regularly in the hospitals to be members of their county and state medical associations in order to be eligible for membership in the American Medical Association.

I would like to know exactly what the ruling is and whose ruling it is.

O. M. Graves, M.D.,
Princeton, Indiana.

Dr. Graves' letter was referred to the Council on Medical Education and Hospitals of the American Medical Association. Dr. Graves was advised as follows:

Dear Dr. Graves:

It is a pleasure to have your inquiry referred to us. Following is the resolution to which you referred:

> Resolved, That it is the opinion of the House of Delegates of the American Medical Association that physicians on the staffs of hospitals approved for intern training by the Council on Medical Education and Hospitals should be limited to members in good standing of their local county medical societies and that the House of Delegates requests the Council on Medical Education and Hospitals to take this under advisement."

You will notice that this is the ruling of the House of Delegates of the American Medical Association. So far as we know, the College of Surgeons has not passed such a ruling, although we understand that they do pay attention to the credentials of the staff members when they consider a hospital for approval. Naturally, membership in organized medicine would constitute one of the indicative earmarks in considering hospitals for approval.

You will notice also that the above resolution refers only to hospitals approved for the training of interns. Enclosed herewith is a copy of the American Medical Association essentials for a registered hospital. A registered hospital is one recognized by the American Medical Association and also listed in the American Medical Directory and the hospital number of *The Journal of the American Medical Association*, but not necessarily one of the kind of hospitals that is approved for intern training.

Very truly yours,

W. D. Cutter, M. D., Secretary,
Council on Medical Education and Hospitals.

REQUEST FOR REPRINTS

Executive Committee,
Indiana State Medical Association.

Gentlemen:

Following is a translation of a circular letter received from the chief librarian of the medical library at Buenos Aires. It is forwarded with the suggestion that it be printed in The Journal for the information of members who may care to send reprints, and perhaps you may desire to donate copies of The Journal.

Very truly yours,

William R. Davidson, M.D.,
Secretary, Indiana State Board of Medical
Registration and Examination.

* * *

Buenos Aires, May 12, 1937.

Dear Dr. Davidson:

The direction of this library, with the purpose in mind of improving its bibliographical value, and with the desire to have available the greatest possible number of foreign publications and particulary those from your country, has the pleasure of addressing you to ask you to be kind enough to donate to our library a copy of each one of your scientific publications.

This library, which is the largest of its kind in South America and the leading one in the Argentine, will be honored to have copies of your scientific papers, and thanking you for your kindness, I remain

Very cordially yours,

Jose Alejandro Trillo,
Chief Librarian.

Note: Please send all correspondence to the following address:

Biblioteca de la Facultad de Ciencias Medicas,
Calle Cordoba 2122,
Buenos Aires, Republic of Argentina.

DEATHS



Dr. E. O. Harrold

EDWIN O. HARROLD, M.D., prominent physician of Marion for more than thirty-five years, died July twelfth, after a long illness. Dr. Harrold was sixty-one years old. Always active in medical organization and civic affairs, Dr. Harrold held many positions, and at the time of his death was serving as president of the Marion General Hospital Association. He was councillor from the Eleventh District for the term 1931 to 1933, was secretary of the Section on Medicine of the Indiana State Medical Association in 1926, and was the founder and first chairman of the Committee on Secretaries' Conference in 1926. He helped to establish several Marion organizations, including the Marion Chamber of Commerce.

Dr. Harrold was a member of the Grant County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

WILLIAM ERNEST BORLEY, M.D., eye, ear, nose and throat specialist of Mishawaka for more than forty years, died June twenty-first, aged sixty-seven years. Dr. Borley was born in Ontario and came to Michigan in 1894, where he graduated from the Wayne University College of Medicine, Detroit. For the past ten years, Dr. Borley had divided his time between South Bend and California where his two sons, both physicians, are living. Dr. Borley was a former member of the St. Joseph County Medical Society, the Indiana State Medical Association and the American Medical Association.

ALONZO MARTIN, M.D., of Bellmore, died June fourteenth, aged eighty-five years. Dr. Martin was a graduate of the College of Physicians and Surgeons, Keokuk, Iowa, in 1878.

WILLIAM GRANT HUFFMAN, M.D., of Richmond, died June twenty-first, aged sixty-eight years. Dr. Huffman graduated from the Western Reserve School of Medicine, Cleveland, in 1896, and had practiced in Richmond since his graduation. In 1915, he was named city physician for Richmond and had continued in that capacity until his death. Dr. Huffman served with the medical corps of the Army during the World War.

JOHN A. E. HAUGH, M.D., of Greensburg, died July ninth, aged seventy-eight years. Dr. Haugh had retired from active practice. He graduated from the Medical College of Indiana, Indianapolis, in 1881, and practiced in Indianapolis, and for a while was associated with Dr. Frank Morrison.

GEORGE W. MAYFIELD, M.D., of Bruceville, died June fifteenth, aged eighty years. Dr. Mayfield was a teacher before he studied medicine. After graduation from the Kentucky School of Medicine in Louisville in 1892, he entered practice in Bruceville where he was active until a few years ago.

CHARLES RILEY, M.D., of New Ross, died July twelfth, aged sixty-seven years. Dr. Riley was a former county coroner for Montgomery County. He graduated from the Eclectic Medical College, Cincinnati, in 1894.

CHARLES W. HAYWOOD, M.D., of Elkhart, died July fourteenth at the Warren Memorial Hospital, Saut Ste. Marie, where he was taken July fifth after having been stricken with ptomaine poisoning July third while on a fishing trip. He was sixty-seven years old. Dr. Haywood was prominent in civic affairs and was greatly interested in Boy Scout work. He was a specialist in roentgenology, and was a member of the Elkhart County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association. Dr. Haywood graduated from the New York Homeopathic Medical College and Flower Hospital, New York, in 1894.

HOOSIER NOTES

Dr. H. L. Bernheimer has announced the removal of his office to 506 Ohio Street, Terre Haute, Indiana.

Dr. Harry E. Murphy, of Franklin, has been elected president of the Franklin Rotary Club.

Dr. W. L. Portteus, of Franklin, spoke before the Franklin Motor Club, June sixteenth, on the subject of "Cancer."

Dr. E. L. Libbert has been made a member of the Greendale school board for a term of three years.

Dr. Eleanor Blackledge is caring for the practice of Dr. Florence Blackford in Franklin while Dr. Blackford is away on vacation.

Dr. William H. Altier, of Fowler, and Miss Pauine Kerr, of Fowler, were married June twenty-third.

Dr. J. F. Garvey, of Carrollton, Kentucky, is now associated with Dr. George A. May, at Madison, Indiana. Dr. Garvey specializes in ophthalmology.

Dr. and Mrs. W. D. Inlow, of Shelbyville, recently returned from a trip abroad which included Africa, the Madeira Islands, Naples, Italy, and Nice, France.

Dr. James E. Gudgel, of Cynthiana, completed his fifty-fourth year of service to that community on April first of this year.

Dr. Robert H. Pierson, of Spencer, has been appointed to the Spencer school board for a three year term.

Dr. E. Lee Burrows, of Bremen, has gone to Vienna where he expects to study for eight months.

Miss Betty Baker, daughter of Dr. and Mrs. Herman Baker, of Evansville, and Dr. Dallas Fickas, of Evansville, were married July third.

Dr. Bernice Williams is associated in the practice of medicine with Dr. G. A. Smith, of New Haven.

Members of the South Bend Kiwanis Club heard Dr. A. S. Giordano talk on "Medical Science Goes to War" at the June 29th luncheon meeting.

Dr. W. E. Thompson, said to be the nation's oldest practicing physician, celebrated his 102nd birthday at his home in Bethel, Ohio, in July.

Dr. O. F. Lehmberg, of Columbia City, is building a new combined home and office of Colonial style architecture, which is to be ready for occupancy October first.

Announcement has been made of the marriage of Miss Nadine Potter, of Bedford, and Dr. Dee D. Gill, of Indianapolis, which took place in Warsaw, Kentucky, in 1933.

Miss Helen Elizabeth Turner, of Indianapolis, and Dr. Max R. Mansfield, of Indianapolis, have announced their marriage which occurred November 5, 1933, in Bloomington.

Miss Helen Kirsch, of Decatur, and Dr. Edward F. Bloemker, of Indianapolis, were married in Decatur, June seventeenth. They will reside in Indianapolis.

Dr. Paul D. Crimm, of Evansville, was made a member of the American Association for Thoracic Surgery at the recent annual meeting of the organization at Saranac Lake, New York.

Dr. Arthur W. Records, of Franklin, was made vice-president of the American Institute of Homeopathy at the June convention of the organization in Boston.

Dr. James Leffel, Jr., of Warsaw, and Miss Dorothy Skinner, of Stockwell, Indiana, were married June twenty-fourth. Dr. and Mrs. Leffel will reside in Rochester, Minnesota, where Dr. Leffel will be associated at the Mayo Clinic.

Miss Kathryn Spigler, daughter of Dr. and Mrs. O. R. Spigler, of Terre Haute, and Dr. Irvin H. Scott, son of Dr. and Mrs. G. D. Scott, of Sullivan, will be married in October.

The Michigan City Clinic has announced the addition of a specialist in obstetrics and gynecology, Dr. R. A. Gardner, who will assist Dr. J. B. Rogers in that work.

Announcement has been made of the marriage of Miss Ann Waybright, daughter of Mr. and Mrs. Howard Waybright, of Newtonville, Massachusetts, and Dr. Wallace E. Childs, son of Dr. and Mrs. A. G. W. Childs, of Madison. The marriage occurred November 30, 1935.

A new lighting device has been installed in the operating room at the Methodist Hospital in Princeton, at a cost of $500. It was purchased and installed by the physicians of Gibson County.

Dr. Charles E. Duffin has resigned from the U. S. Public Health Service to enter private practice at Richmond, Indiana. Dr. Duffin has been with the U. S. Marine Hospital at Evansville, Indiana. He will take up his practice in Richmond on August first.

Dr. Bert Moore has been named superintendent in charge of the Knox County Tuberculosis Hospital which is scheduled to open about September first. Dr. Moore has had an extensive experience in tuberculosis work in various parts of the United States.

The Indiana University medical school cancer clinic has received a gift of three thousand dollars from funds under the direction of the research committee for the purchase of radium to be used in the clinic.

The 27th annual meeting of the medical section of the American Life Convention was held in Colorado Springs, June 17 to 19. Dr. Walter E. Thornton, of Fort Wayne, was made chairman of the medical section.

Dr. Richard B. Gannon is now associated in the practice of medicine with his father, Dr. George W. Gannon, of Gary. Dr. Gannon's older son, Attorney Charles W. Gannon, also has an office in the suite where the two physicians are located.

More than one hundred physicians attended the homecoming and graduation dinner at the Indianapolis Methodist Hospital, June 30, when diplomas and keys were presented to fifteen internes who have completed their year of service.

The oldest doctor in White County, both in years and service to his profession, is Dr. George R. Clayton, of Monon, who began his practice in Monon 56 years ago. Dr. Clayton was 83 years old in April, and still attends his patients regularly.

Dr. O. T. Brazelton, of Princeton, was elected president of the First District Medical Association at the annual meeting held in Evansville, June seventeenth. Dr. Minor Miller, of Evansville, was made vice-president, and Dr. Henry Faul, of Evansville, was made secretary-treasurer.

The Western Branch Society of the American Urological Association held its annual convention in Mt. Rainier National Park, Washington, July 11 to 14. Dr. H. O. Mertz, of Indianapolis, was a guest speaker, his subject being "A Consideration of Urological Problems in Infants and Children."

Dr. Edmund Van Buskirk, of Fort Wayne, was elected president of the Indiana State Board of Health at a meeting held July fifteenth. Dr. William B. Wise, of Indianapolis, is a new member elected to serve on the board. Members re-elected are Dr. Ernest Rupel, of Indianapolis, and Dr. J. C. Glackman, of Rockport.

Central State Hospital in Indianapolis has been named a member of the Cooperative Clinical Group by Dr. Thomas Parran, surgeon-general of the United States Public Health Service. Central State Hospital was chosen for its outstanding work in the treatment of paresis with malarial fever.

One of the world's greatest cancer research centers was created at Yale University in June through a gift approximating ten million dollars. The gift established the Jane Coffin Childs Memorial Fund for medical research to study the causes of cancer.

The American College of Physicians has announced that the date of its next annual meeting will be April 4-8, 1938. The meeting will be held in New York City, with headquarters at the Waldorf-Astoria Hotel. The dates are announced early in an effort to avoid conflicts in the dates of annual meetings of other organizations.

The Indiana State Medical, Dental, and Pharmaceutical Association, an organization of Negro professional men, held a meeting in Gary, June twenty-third. Speakers included Dr. A. H. Wilson, of Evansville; Dr. E. M. Shanklin, of Hammond; Dr. R. O. Wharton, of Gary, and Dr. John J. Mullowney, of Nashville, Tennessee.

In an effort to expand the influence of the Mississippi Valley Medical Society, a number of annual awards has recently been established. The awards include free memberships to encourage interest in postgraduate study on the part of young medical graduates, and medals and cash prizes to award scientific exhibits and scientific contributions.

The Elwood Medical Society, at its June 25th meeting, voted to cooperate with the Elwood Parent-Teacher Council in conducting a medical clinic for children of pre-school age this autumn. It is planned to open the clinic to all children who enroll in school for the first time next autumn. A minimum fee will be charged parents who are able to pay; otherwise, there will be no charge. Phycians and dentists will conduct the examinations.

Results of the June examinations conducted by the State Board of Medical Registration and Examination June 22, 23, and 24, will be announced by the board in October. A total of 139 applicants took the examinations. Of these, 132 took final examinations, while seven took the sophomore examination. Examination papers now are being graded by the medical board members.

A sub-committee to the State Division of Public Health Liaison Committee has been formed for the purpose of studying maternal morbidity and mortality rates in Indiana, through the cooperation of the Indiana State Medical Association and the State Board of Health. The committee consists of Dr. H. F. Beckman, Chairman; Dr. J. C. Carter and Dr. Verne K. Harvey.

Three physicians celebrated the 50th anniversary of their graduation from the Kentucky School of Medicine in Louisville when Dr. Robert Trout, of Oaktown, Indiana, Dr. Simon P. Schoeder, of Nashville, Illinois, and Dr. I. H. Doolittle, of South Bend, met at Dr. Trout's home July fourth. The meeting at Dr. Trout's home has been a regular annual event for a good many years.

Dr. Guy G. Campbell, East Gary physician, has gone to Liberia, in Africa, where he has accepted a position as head of the medical staff of a rubber company plantation. Mrs. Campbell will accompany her husband to Liberia, while their three children will attend school in London. Dr. Campbell became a specialist in tropical medicine while in the service of the British government in British North Borneo from 1916 to 1932.

Dr. Irvine Page, of Indianapolis and New York, has been named head of the research department of the Indianapolis City Hospital, and will assume his duties there September fifteenth. Dr. Page was retained for the hospital post by Eli Lilly & Company which cooperates with the hospital in laboratory and research work. Dr. Page has been doing research work for the Rockefeller Institute in New York.

According to recent announcements, two medical officers of the regular army whose homes are in Indiana have been advanced to higher grades. They are Major James W. Duckworth, of Martinsville, who has been promoted to lieutenant colonel, and Captain Frank B. Wakeman, of Valparaiso, who has been advanced to major. Dr. Duckworth is stationed at Fort Benning, Georgia, and Dr. Wakeman is studying at Johns Hopkins medical school in Baltimore.

The American Board of Obstetrics and Gynecology will hold its next written examination and review of case histories for Group B applicants November 6, 1937, in various cities in the United States and Canada. For Groups A and B, examinations will be held in San Francisco, California, June 13 and 14, just prior to the meeting of the American Medical Association. Application blanks and detailed information may be obtained from Dr. Paul Titus, secretary, 1015 Highland Building, Pittsburgh (6), Pennsylvania.

An examination of applicants for certificates of the American Board of Otolaryngology was held in Philadelphia, June 7th and 8th, prior to the meeting of the American Medical Association. Seventy-two of the ninety-four candidates were certified. An examination will be held in Chicago, October 8th and 9th, prior to the meeting of the American Academy of Ohpthalmology and Otolaryngology. Prospective applicants should secure blanks from the secretary, Dr. W. P. Wherry, 1500 Medical Arts Building, Omaha, Nebraska.

The Pan-American Medical Association will take its seventh cruise-congress January 15-31, on the *Queen of Bermuda*. Four and one-half days will be spent in Havana where the main part of the congress will be held. The cruise will continue to Haiti, Santo Domingo, and Porto Rico. The program committee will be glad to have applications for the presentation of scientific contributions, and applications for reservations should be sent to the Pan-American Medical Association, 745 Fifth Avenue, New York.

The state budget committee has allocated $325,000 for a program of building at the Indiana Women's Prison in Indianapolis. The largest unit in the program will be a new hospital and admission building which will include both a medical unit and a receiving division where new prisoners may be isolated pending medical examinations. The sum of $250,000 has been allocated to the Richmond State Hospital for the Insane for the erection of a hospital building there, according to newspaper reports.

Dr. John F. Barnhill, well known Indiana teacher, has completed a volume on surgery of the head and neck which will come from the press of William Wood & Company, Baltimore, this month. Dr. Barnhill (whose present address is 5369 Pine Tree Drive, Miami Beach, Florida) has been so busy with teaching and writing that he has had very little time for practice, for in addition to the work on his book which was undertaken at the request of his postgraduate students and required several years to complete, he wrote several novels, one of which, "Hatching the American Eagle," has been accepted and also will be published in August. However, Dr. Barnhill finds time to attend medical meetings, and has been made president for 1938 of the American Laryngological Association.

Arrangements are being made to hold the fourth international Leprosy Conference in Cairo, beginning March 21, 1938. The conference is being organized by the International Leprosy Association, and will be the first international conference arranged by the association since its inauguration in 1931. Three previous conferences of a similar nature have been held—at Berlin in 1897, at Bergen in 1909, and at Strassbourg in 1923. The Egyptian government is inviting all countries concerned to send official degelates, and doctors and others interested in the subject are invited to be present. Information may be obtained from the secretary of the International Leprosy Association, 131 Baker Street, London, W. 1.

Auxiliary to the A. M. A.

The fifteenth annual meeting of the Woman's Auxiliary to the American Medical Association held in Atlantic City was attended by a large group of enthusiastic women from all over the United States, showing the growing interest in the organization. Presidents representing the auxiliaries of thirty-eight states were there and reported the fine work the members are doing, always cooperating with the profession.

The social program was a very full one including a "Get Acquainted Beach and Steel-Pier Party," a Southern Breakfast, a Hackney's famous Seafood Luncheon, an Auxiliary luncheon, a "Bring-Your-Husband Dinner" and a Luncheon Beach Party and Style Show. This lovely style show with fashions shown by National Cotton Textiles Institute was the first style show Atlantic City had ever given on the beach.

At the last business session, Mrs. Augustus S. Kech, of Altoona, Pennsylvania, took her office as president of the National Auxiliary. The officers elected were:

President-elect, Mrs C. C. Tomlinson, Nebraska.

First Vice-President, Mrs. Prentis Willson, Washington, D. C.

Second Vice-President, Mrs. Lucius Cole, Illinois.

Third Vice-President, Mrs. R. M. Schulte, Washington.

Fourth Vice-President, Mrs. William Hibbitts, Arkansas.

Recording Secretary. Mrs. T. R. W. Wilson, South Carolina.

Treasurer, Mrs. Elmer Witley, Michigan.

Directors, Mrs. Carl Surran, Atlantic City; Mrs. John Burns, Texas; Mrs. Lelis Paul, Utah, and Mrs. Robert Fitzgerald, Wisconsin.

Indiana was honored in having Mrs. Edmund D. Clark, of Indianapolis, appointed as national chairman of legislation. Other Indiana women attending the meeting were Mrs. Marcus Ravdin, Evansville, president of the Indiana Auxiliary; Mrs. Herman Baker, Evansville; Mrs. Larue Carter, Indianapolis, and Mrs. George R. Dillinger, French Lick.

INDIANA UNIVERSITY NEWS NOTES

Dr. Robert Glass, neurological surgeon, has been reappointed to the Louis C. Huesmann fellowship in the Indiana University Medical School and will begin his third term under this fellowship immediately, it has been announced by Hugh McK. Landon, president of the Louis C. Huesmann foundation.

The fellowship is awarded annually by the foundation as a means of aiding the James Whitcomb Riley Hospital for Children and the Indiana University Medical Center.

The Louis C. Huesmann foundation was established by friends of Mr. Huesmann, well known Indianapolis philanthropist and business man, upon his death several years ago. The foundation has aided in a number of research problems carried out in the Riley Hospital, in which Mr. Huesmann was deeply interested prior to his death.

Dr. Clyde G. Culbertson has been named chief of the division of laboratories of the Indiana University Medical Center in Indianapolis. The appointment was made by Dean W. D. Gatch, of the I. U. Medical School, who at the same time announced the consolidation of all laboratory service on the medical center campus into one division.

Dr. Culbertson will have as assistants Dr. Lynn Arbogast and Dr. Albert Ratcliffe, both of whom have just completed their interneships in the hospitals of the University medical center.

The consolidation of all laboratories into one division includes the central clinical laboratory for the medical center, the research laboratory, supervision of the laboratories of the State Board of Health, and another to be established as a medico-legal laboratory. Dr. Culbertson will have under his direct supervision about 35 technicians.

Dr. Culbertson is a graduate of Indiana University, having received his B.S. degree in 1929 and his M.D. degree in 1931. He has been in charge of the central clinical laboratory of the medical center since his graduation and of the laboratories of the State Board of Health since 1933. He was the recipient of an honorary medal given by the Junior Chamber of Commerce in 1936 for outstanding work among the younger men of the community.

In his new position, Dr. Culbertson will carry on the laboratory work incidental to many problems in research in the diseases of men, women and children and in surgery. Under his supervision, approximately 300,000 laboratory tests and examinations will be carried out in the various laboratories during the coming year. Important investigation in the field of research will be supervised by Dr. Culbertson in the research laboratories made available to him on the I .U. medical center campus.

Albert H. Scheidt, assistant administrator of the medical school hospitals, is now working with Dr. Culbertson in a study of the costs of laboratory investigations and tests.

THE ACUTE GALL BLADDER

FREDERIC TAYLOR, M.D.

(Continued from page 391)

of operation 24 hours after acute onset. It is evident that even though the patient be explored during the second or third days of his acute illness, a few complications may be expected at this early date.

One other point should be mentioned in regard to the period just before operation. This should *not* be occupied with a rather passive regime of morphine and bed rest. Active hydration must be started and continued. The damaged liver must be saturated with glucose. This is best effected with massive amounts of 5 per cent glucose solution given intravenously.

CONCLUSIONS

1. It has been shown in the cases of acute gall bladder studied that the mortality rate is excessively high in those patients in which operation was deferred more than three or four days after the acute onset.

2. The hazards of early operation are far less than those resulting from a waiting policy.

3. The complications following an acute gall bladder are frequent (28.6 per cent).

4. These complications are extremely serious and carry a high mortality (30.8 per cent in the present series).

5. It is evident then that the policy of watchful waiting when dealing with the acute gall bladder is a risky and radical procedure. Early operation is much safer and, therefore, less radical.

6. When the diagnosis is not definite as is frequently the case, it would seem wiser to remove an occasional edematous gall bladder than take a chance on the complications which might arise from an unoperated suppurative or gangrenous gall bladder.

7. The patient is never so sick that he should be rushed to the operating room before administration of adequate amounts of intravenous glucose solution.

614 Hume Mansur Bldg.

SOCIETIES AND INSTITUTIONS

THE INDIANA STATE MEDICAL ASSOCIATION

EXECUTIVE COMMITTEE

July 11, 1937.

Roll call showed the following present: C. A. Nafe, M.D., chairman; C. H. McCaskey, M.D.; E. D. Clark, M.D.; H. M. Baker, M.D.; A. F. Weyerbacher, M.D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary.

The monthly statement of Receipts and Expenditures for May and June and the reports of the Budget for May and June for the Association committees and THE JOURNAL were presented.

Membership Report

Number of members on July 10, 1937	2,915
Number of members on July 10, 1936	2,749
Gain over last year	166
Number of members Dec. 31, 1936	2,840

The Committee hopes that the 3,000 mark can be reached this year.

1937 Session at French Lick

(1) *Commercial exhibit.* 21 exhibit spaces sold; 10 to be sold.

(2) Report made that the scientific exhibit arrangements had been completed, the president, president-elect, secretary and two members of the scientific exhibit committee having held a meeting at French Lick and made a complete survey and arrangements for taking care of the exhibit.

(3) *Banquet speakers.* Dr. Irvin Abell, president-elect of the American Medical Association, has accepted, and Al Wynkoop, editor of the Lebanon *Reporter*, has been invited.

(4) *Badges.* Upon the motion of Dr. Clark, seconded by Dr. McCaskey, the same badges as were used last year are to be ordered for this year.

(5) *Exhibit of medical flood pictures.* The Executive Committee approved the suggestion that the Bureau of Publicity present an exhibit of flood pictures and flood articles which will show the work of the Indiana profession during the Ohio River flood last winter.

Postgraduate Course

(1) Report received from Dr. Leonard Ensminger in regard to the conference of state postgraduate chairmen held at Atlantic City on Wednesday, June 9, during the American Medical Association meeting there. Dr. Ensminger reported that many interesting things were discussed at this meeting and many helpful suggestions were obtained. He stated that very likely we can look forward to the time when the American Medical Association will have more of a part in these postgraduate affairs.

(2) *Appointment of Committee for 1938.* Following the suggestion of Dr. Clark, the present president, that Dr. Herman Baker, president-elect, appoint the 1938 committee as soon as possible, Dr. Baker named the present committee. He said he thought it would be well to let the present committee stand as it is and start work immediately upon the 1938 postgraduate program. Upon the motion of Dr. McCaskey, seconded by Dr. Baker, the work of the 1937 committee was approved and commended and the secretary was instructed to write the committee expressing the appreciation of the Executive Committee for the work of the Postgraduate Committee and particularly commending it for the low expense incurred.

Legislative, Legal and Social Security Matters

(1) *Biemiller bills defeated in Wisconsin.* Report received from Wisconsin in regard to the defeat of the Biemiller socialized medicine bills and also the defeat of the cult bills that had been introduced in the Wisconsin legislature.

(2) *Social Service Conference in Indianapolis.* The Executive Committee expressed its approval of the manner in which the social service conference in Indianapolis was covered by the state legislative committee of the Indiana State Medical Association with the Woman's Auxiliary to the Indianapolis Medical Society cooperating. Formal report of this meeting was sent to the American Medical Association and an editorial concerning the conference appeared in the July issue of THE JOURNAL of the Indiana State Medical Association.

(3) *Labor union organization of professional men.* Word received from the Indiana Society of Professional Engineers that some of its members working with industrial concerns have been asked to join the union. As it was felt that the physicians who are in the employment of industrial firms might be the next group to be asked to affiliate with the union, the Committee felt that close touch should be kept with the engineers and other professional groups as to just what steps are being taken in regard to this matter.

(4) *Afflicted children filter system in Michigan.* Bulletin concerning the working of the filter system in Michigan brought before the committee, followed by a discussion of the Indiana system. This work in Indiana is being done under the direction of Oliver Greer, M.D., director, Services for Crippled Children, Indiana State Department of Public Welfare. Working in an advisory capacity is a group of some 36 physicians, dentists, nurses and representatives of lay organizations. The physicians on this advisory committee are: E. D. Clark, Indianapolis; Robert B. Acker, South Bend; Herman M. Baker, Evansville; Sumner A. Furniss, Indianapolis; George J. Garceau, Indianapolis; W. D. Gatch, Indianapolis, and V. K. Harvey, Indianapolis.

In addition to this advisory committee is a technical subcommittee composed of the following seven physicians: I. C. Barclay, Evansville; R. L. Sensenich, South Bend; F. S. Crockett, Lafayette; John H. Green, North Vernon; L. A. Ensminger, Indianapolis; Louis D. Belden, Indianapolis, and C. J. Clark, Indianapolis.

Resettlement Administration

(1) Members of the Executive Committee reported upon a conference held with Frederic I. Barrows, attorney for the Indiana Farm Bureau, who discussed the possible creation of cooperatives here in Indiana.

(2) Dr. Herman Baker reported that physicians at Mount Vernon had been approached by the local agents of the Resettlement Administration in regard to the pre-payment health cooperative set-up. Nothing official has come to the headquarters office in regard to this.

Medical Economics

(1) *Public health nurse in Fayette County.* Letter received from Dr. R. H. Elliott, of Connersville, in regard to the employment of a public health nurse in Fayette County. Dr. Elliott asked the attitude of the State Association in this matter. The Executive Committee stated that the policy of the State Association in the past has always been that public health nurses should be employed only with the consent and the approval of each county medical society. The Committee understands that recently several counties have employed nurses with the approval of the county medical society who are working directly under the medical advisory committee of the county medical society, which committee outlines the nurse's duties and the scope of her work. The Committee feels that the entire matter of the employment of a public health nurse is up to each local county medical society as each county society should know the needs of its own community for such a nurse.

(2) *Fee splitting.*

(a) Attention of the Committee called to an article that appeared in *Liberty* magazine of June 30 in regard to fee splitting.

(b) Copy of article that appeared in the April, 1910, issue of the *Buffalo Medical Journal*, by Matthew D. Mann, M.D., Buffalo, New York, entitled, "Dividing Professional Fees," to be distributed to each member of the Committee.

(c) Discussion in regard to optical rebates held by the Committee.

(3) *Gross income and store tax.*

(a) Letter received from the Gross Income Tax and Store License Division stating that dispensing physicians "making a separate charge for such medicine separate and apart from the charges for their professional services and who dispense this medicine from a fixed and permanent place of business, could qualify as a retail merchant upon that part of their income which is derived from activities as a retail merchant and would be entitled to the $250.00 per month exemption."

However, the letter further states, "This exemption could not be taken from income derived from the rendition of professional service or from any other source. These physicians would also be liable for a store license which would result in this professional group holding themselves out to the public as retail merchants."

(b) *Exemption of State Association from payment of gross income tax.* Following the opinion of Albert Stump, the State Association is to ask that it be exempted from the payment of gross income tax. This matter is to be taken up with the Gross Income Tax Division by Mr. Stump.

(4) *The Seven Horsemen of Death.* Articles that appeared in The Indianapolis *Times* entitled, "The Seven Horsemen of Death," brought to the attention of the Committee. These articles were highly commended by the Committee and a letter sent to The Indianapolis *Times* to that effect.

Venereal Disease Control Program

Dr. Frank Gastineau, with Dr. Norman Beatty cooperating, appeared before the Executive Committee and outlined a venereal disease program for Indianapolis that had been approved by the Council of the Indianapolis Medical Society. The Committee was of the opinion that this program should be printed in The Journal, and upon the motion of Dr. Clark, seconded by Dr. Baker, the program as presented was approved for publication in The Journal, and the Committee highly commended the work done by Dr. Gastineau and Dr. Beatty.

A. M. A. Meeting

(1) Report and editorial on the Atlantic City session with points of particular interest to the Indiana profession carried in the July Journal.

(2) Resolutions passed by the Medical and Chirurgical Faculty of the State of Maryland and the Florida Medical Association brought to the attention of the Committee.

(3) *Indiana-Ohio special train for San Francisco meeting.* Letter from the secretary of the Ohio State Medical Association brought to the attention of the Committee and although the Committee did not give the matter its formal approval, it thought that such an arrangement might be satisfactory and instructed the secretary to get further information concerning such a train.

Organization Matters

(1) An article entitled, "Our District Societies," prepared by Walter F. Kelly, M.D., brought to the attention of the Executive Committee. The Committee approved the publication of this article in the "Voice of the Doctor" column in The Journal and suggested that in addition to comments concerning district societies, it would be well to condemn vigorously the numerous so-called academies and other medical societies that wean the interest of the physicians away from the regular county and district medical societies. By this the Committee did not mean the annual meetings of such organizations as the Indiana Academy of Ophthalmology and Otolaryngology, etc., but it did mean those local organizations within groups which divert the interest of the profession from the local county medical societies and from the districts. The Committee feels that all the profession's energy and financial backing should be given to the development of the district and local county medical societies.

Report of Committee on Mental Health

The Executive Committee received the report of the Mental Health Committee of the State Association and commended the committee upon the splendid manner in which it had handled several vital problems during the past year. The Executive Committee particularly desires to commend the Committee on Mental Health for the detailed manner in which it has made an investigation of the Indiana University psychological clinics.

Upon the motion of Dr. McCaskey, seconded by Dr. Clark, the Executive Committee requests the Mental Health Committee to make an investigation and report upon the work that is being done by the Mental Hygiene Department of the Indiana University School of Medicine and the relation of that department to the work that is being done by the Indiana University psychological clinics. The secretary was instructed to send a copy of this action to the chairman and the members of the Mental Health Committee of the Indiana State Medical Association.

Health Insurance

(1) *Cooperatives.*

(a) *National.* Correspondence in regard to the Washington cooperative brought to the attention of the Committee. The Committee instructed the headquarters office to be of service to the American Medical Association any way possible in this matter.

(b) *Local.* Despite many rumors in regard to local health cooperatives, upon tracing down these rumors no information can be obtained in regard to any cooperative that is now in existence in Indiana outside of the Economy group.

(2) Article regarding health insurance in British Columbia brought to the attention of the Committee. The Committee was of the opinion that this article should be reprinted in The Journal.

Questionnaire from the American Society for the Control of Cancer

This questionnaire is to be filled out with the statement that the Executive Committee, along with the Bureau of Publicity of the State Association, is looking after the cancer control question here in Indiana.

Malpractice

Discontinuance of medical defense plans in Ohio and Illinois. Report made that medical defense plans had been discontinued in Ohio and Illinois. Albert Stump was to make further study of the provisions for medical defense offered by the State Association and report back to the Committee at its next meeting. Suggestions from Mr. Stump in regard to this are as follows:

> "There is one point on which we believe there might be some question raised by the Bar Association as to whether the Medical Association engages in the practice of law. Section 3 of Chapter XII includes provisions which were allowed to remain from some previous By-Laws adopted before this question of the unlawful practice of law began to be agitated by the Bar Association. It contains the provision giving to the Committee the power to summon and employ expert witnesses and incur such other expenses as in the judgment of the Committee may be necessary in the defense of members. Section 10 is the provision requiring an agreement that the case shall not be compromised or settled without the consent of a majority of the Committee of Medical Defense.
>
> "Those two provisions I feel should be given some consideration with a view to modification at the next meeting of the Executive Committee. After such consideration it may be advisable to suggest amendments to the By-Laws in this regard, to avoid any difficulties which might otherwise develop through the Bar Association. Up to this time I have heard no comment from any source whatsoever concerning the medical defense plan of the State Association."

BUREAU OF PUBLICITY

May 4, 1937.

Present: William N. Wishard, M.D., chairman; F. M. Gastineau, M.D., and T. A. Hendricks, executive secretary.

The release, "Visit Your Hospital May 12," was approved for publication in May 10 papers.

Schedule of district meetings:

May 5—Eighth District	Anderson
May 12—Third District	Jeffersonville
May 18—Ninth District	Crawfordsville
May 19—Eleventh District	Wabash
May 20—Sixth District	Greenfield
May 26—Fourth District	North Vernon
June 17—First District	Evansville

Graduate education meeting, Indianapolis, May 10 to 14.

Report on medical meeting:

April 27—Daviess-Martin County Medical Society, Washington, Indiana. "Work of the Indiana State Medical Association." (23 present.)

Correspondence with the general manager of an Indianapolis firm in regard to the criticism of the headquarters office concerning the sales letter put out by this company regarding

the establishment of an "optical department" brought to the attention of the Bureau.

The chief of the Bureau of Maternal and Child Health of the Indiana State Board of Health attended the meeting and made a report to the Bureau of the educational activities of the Bureau of Maternal and Child Health. A resume of the dates and places where "refresher courses" were conducted, with the list of the speakers and their subjects was presented. Likwise, a similar outline was presented which covered all the physicians' lectures for lay audiences.

A summary of the above report showed the total number of "refresher courses" given up to that date to be 42, of which 10 were councilor district programs, the balance being given before local county medical societies. The total number of lay programs conducted by physicians was 45. This figure does not include the educational health talks given by the staff of the Department of Physical and Health Education. From this department there are approximately six to ten lectures given each week throughout the State of Indiana by the director and his assistant.

Copy of the *Nassau Medical News* containing the article, "Modern Health Advertising," brought to the attention of the Bureau.

Articles from the Public Relations Bureau of the Medical Society of the State of New York also brought to the attention of the Bureau.

Letter received from an Indiana physician telling of the heroism of a man who risked his life to save a small boy brought to the attention of the Bureau. The Bureau suggested that the letter be forwarded to the Carnegie Hero Fund Commission.

INDIANA STATE BOARD OF HEALTH

BUREAU OF COMMUNICABLE DISEASES

Monthly Report, June, 1937

Diseases	*June, 1937*	*May, 1937*	*April, 1937*	*June, 1936*	*June, 1935*
Tuberculosis	247	223	165	128	193
Chickenpox	139	304	451	67	89
Measles	2.148	2,677	1,209	40	343
Scarlet Fever	320	456	1,030	222	232
Smallpox	61	73	55	15	4
Typhoid Fever	12	4	3	16	10
Whooping Cough	297	352	357	119	11
Diphtheria	29	29	37	27	55
Influenza	39	55	473	33	27
Pneumonia	69	49	145	65	67
Mumps	73	199	278	82	80
Poliomyelitis	1	2	2	0	2
Meningitis	7	11	18	6	9
Amebic Dysentery	1	1	0	0	0
Septic Sore Throat	1	1	0	0	0
Malaria	2	0	0	0	0
Typhus Fever	1	0	0	0	0
Ophthalima Neonatorum	1	0	0	0	0

WAYNE-UNION COUNTY MEDICAL SOCIETY

Resolutions Concerning Dr. Huff

The death of Dr. Oliver N. Huff, Fountain City, Indiana, on April 23, 1937, climaxed a long and active life of service in northern Wayne County. We, as a group, join his many individual friends, in a formal expression of respect, and a keen sense of loss in his passing. Quietly he moved among us, staunch, upright, personable. Silently he has slipped way. Our whole community feels that a "kindly light" has gone.

Dr. Huff was born and educated at Fountain City, in the tradition of Friends. He attended Earlham College, and was graduated in medicine from the University of Michigan in 1877. His entire life centered here, with the exception of a ten-year period of study and practice in Chicago. During that time he was married to Miss Sophie Bogue, daughter of a prominent physician there. She was a well known figure at Fountain City until her death in 1931.

A secretary and past president of the County Medical Society, Dr. Huff was for many years health officer at Fountain City. He was active in civic, religious, and educational affairs, and was especially a lover of books and book music. His family practice extended widely over fifty years, and only those who knew him in distress, can realize the quality of his counsel.

The Wayne-Union Medical Society wishes to express herewith, its deep sense of personal loss in the passing of this "grand old man" of medicine, honorary member of our Society.

This Committee further moves that this memorial be made a part of the minutes of this Society, and that copies of it be sent to the family, and to the Indiana State Medical Association.

L. T. Cox, M.D., *Chairman,*
J. C. Hagie, M.D.,
L. F. Ross, M.D.

COUNTY SOCIETY REPORTS

ADAMS COUNTY MEDICAL SOCIETY held a meeting at Lehman's Park in Berne, July first. A picnic supper was served.

* * *

DEARBORN-OHIO COUNTY MEDICAL SOCIETY held a meeting in the District Public Health Office at Rising Sun, July eighth. Dr. Thurman B. Rice, of Indianapolis, was the principal speaker. An inspection of the new Fourth District Public Health Office was made.

* * *

DUBOIS COUNTY MEDICAL SOCIETY members met in Jasper, June twenty-ninth, to hear Mr. Albert Stump, of Indianapolis, discuss the importance of the professional man to the community. An invitation was extended to physicians, attorneys, dentists, nurses, and ministers to attend the meeting.

* * *

FULTON COUNTY MEDICAL SOCIETY members attended a meeting at the Rochester County Club, July seventh, when Dr. W. E. Adams, of Chicago, addressed the group on "Some Recent Advances in Thoracic Surgery." Drs. Dean K. Stinson and Mark M. Piper were in charge of the meeting.

* * *

GIBSON COUNTY MEDICAL SOCIETY held a meeting at Princeton, in the Emerson Hotel, June fourteenth. Dr. H. M. Trusler, of Indianapolis, presented an illustrated lecture on plastic surgery. Attendance numbered twenty-five.

At the July ninth meeting of the Gibson County Medical Society at Princeton, Dr. James B. Maple, of Sullivan, discussed obstetrical moving pictures. Drs. H. M. Arthur, of Hazelton, and Dr. M. L. Arthur, of Patoka, invited the physicians and their families to a fish dinner at Hazelton which was enjoyed by all. A play entitled "Marriage Bureau" was presented by local talent. Attendance numbered fifty.

* * *

GRANT COUNTY MEDICAL SOCIETY members met at the Spencer Hotel in Marion, June twenty-fourth, to hear Dr. Sidney Price, of Marion, discuss "The Modern Management of Peptic Ulcer."

* * *

HANCOCK COUNTY MEDICAL SOCIETY met for its regular monthly meeting at the Columbia Hotel in Greenfield, June twenty-first. Drs. W. D. Gatch and John Owens, of Indianapolis, presented a discussion of "Gastric and Duodenal Ulcers." This was the last meeting of the society until fall.

HENDRICKS COUNTY MEDICAL SOCIETY met at Danville, June seventeenth for a noon luncheon meeting. Dr. Amos Carter, of Plainfield, gave reminiscences of a long practice together with service as superintendent of the Rockville State Tuberculosis Hospital and physician to the Boys' School. Attendance numbered twelve.

* * *

MARSHALL COUNTY MEDICAL SOCIETY members met at the Plymouth Country Club, June twenty-third, to hear Dr. Carl Myers, of Chicago, discuss "Recent Advances in Intestinal Surgery." This was an afternoon and evening meeting, with golf in the afternoon, and a dinner meeting in the evening. Attendance numbered fifty-seven.

* * *

PARKE-VERMILLION COUNTY MEDICAL SOCIETY members met at the Vermillion County Hospital, Clinton, June sixteenth. Dr. J. C. Carter, of Indianapolis, talked on "Summer Diseases of Children."

* * *

TIPPECANOE COUNTY MEDICAL SOCIETY met at Lincoln Lodge, Lafayette, June fifteenth. Judge W. Lynn Parkinson of the County Circuit Court, talked on "The Care of Crippled and Diseased Children," and "The Indiana Penal System." Both papers were well received, and a committee was appointed by the president of the society to cooperate with the court in delinquent and criminal cases. Dr. F. S. Crockett gave a report of the Atlantic City meeting of the American Medical Association. Attendance numbered forty.

The annual picnic of the society was held at the Monticello Country Club, July fifteenth, afternoon and evening.

* * *

WAYNE-UNION COUNTY MEDICAL SOCIETY members held a banquet meeting, June seventeenth, for the final meeting of the season. Dr. C. C. Payne, of Dayton, Ohio, presented a paper on "Physical Handicaps of the Present Day School Child."

INDIANA PROPOSES TO DISPOSE OF SYPHILIS

(Continued from page 400)

9. That a full-time physician be employed by the state board of health to be in charge of venereal disease educational work.

10. That the Wassermann card be changed at the state board of health laboratory, omitting the indigent clause, leaving it up to the doctor as to whether or not his patient can afford to pay, and that all positive serological tests be reported to the state board of health.

11. Recommended that the state board of health make a survey of darkfield equipment for use in the state and recommended that lectures be given by representative members of the medical association to the students at Purdue and other pharmaceutical schools, setting out our viewpoint on venereal disease.

12. Recommended that the medical association contact the Retail Druggists Association, urging members not to treat venereal disease, but to refer all such cases to physicians.

COMMITTEE ON SYPHILIS CONTROL OF THE INDIANA STATE MEDICAL ASSOCIATION,
F. R. Nicholas Carter, M.D.,
Chairman,
Minor W. Miller, M.D.,
Ernest O. Nay, M.D.

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BOOKS

BOOKS RECEIVED

PHYSICAL DIAGNOSIS. The Art and Technic of History Taking and Physical Examination of the Patient in Health and in Disease. By Don C. Sutton, M.S., M.D., Associate professor of medicine, Northwestern University School of Medicine. 495 pages with 298 illustrations. Cloth. Price $5.00. The C. V. Mosby Company, St. Louis, 1937.

* * *

THE TECHNIC OF LOCAL ANESTHESIA. By Arthur E. Hertzler, M.D., professor of surgery in the University of Kansas and surgeon to the Halstead Hospital, Halstead, Kansas. Sixth edition, 283 pages with 142 illustrations. Cloth. Price $5.00. The C. V. Mosby Company, St. Louis, 1937.

* * *

NUTRITIVE ASPECTS OF CANNED FOODS. A bibliography of scientific reports, and helpful tables of food data. Compiled by the Nutrition Laboratory, Research Department of the American Can Company. 110 pages, illustrated. Cloth. American Can Company, 1937.

* * *

CLINICAL ENDOCRINOLOGY. By Samuel A. Loewenberg, M.D., F.A.C.P., clinical professor of medicine, Jefferson Medical College, Philadelphia. Foreword by Hobart A. Reimann, M.D., professor of medicine and clinical medicine, Jefferson Medical College. 825 pages with 194 illustrations and 37 charts and tables. Cloth. Price $8.00. F. A. Davis Company, Philadelphia, 1937.

* * *

THE LABORATORY DIAGNOSIS OF SYPHILIS. The Theory, Technic, and Clinical Interpretation of the Wassermann and Floceulation Tests with Serum and Spinal Fluid. By Harry Eagle, M.D., Passed Assistant Surgeon, United States Public Health Service, Washington, D. C.; lecturer in medicine, Johns Hopkins University Medical School, Baltimore. Foreword by J. Earle Moore, M.D., Associate in Medicine, Johns Hopkins University. 440 pages. Cloth. Price $5.00. The C. V. Mosby Company, St. Louis, 1937.

* * *

SYNOPSIS OF DIGESTIVE DISEASES. By John L. Kantor Ph.D., M.D., associate in medicine, Columbia University; gastro-enterologist and associate roentgenologist, Montefiore Hospital for Chronic Diseases, New York. 302 pages, illustrated. Fabric binding. Price $3.50. The C. V. Mosby Company, St. Louis, 1937.

* * *

SYNOPSIS OF GYNECOLOGY. Based on the Textbook "Diseases of Women." By Harry Sturgeon Crossen, M.D., F.A.C.S., professor emeritus of clinical gynecology, Washington University School of Medicine; and Robert James Crossen, M.D., assistant professor of clinical gynecology and obstetries, Washington University School of Medicine. Second edition. Fabric binding. 247 pages, illustrated. Price $3.00. The C. V. Mosby Company, St. Louis, 1937.

* * *

A TEXTBOOK OF SURGICAL NURSING. By Henry S. Brookes, Jr., M.D., instructor in clinical surgery, Washington University School of Medicine. 636 pages, with 233 illustrations. Cloth. Price $3.50. The C. V. Mosby Company, St. Louis, 1937.

MATERNAL CARE. The Principles of Antepartum, Intrapartum, and Postpartum Care for the Practitioner of Obstetries. Approved by The American Committee on Maternal Welfare, Inc. Prepared by Dr. W. D. Danforth, Dr. G. W. Kosmak, Dr. R. L. DeNormandie, and Dr. F. L. Adair, with Dr. Adair as editor. 93 pages, pocket size. Paper cover, 25 cents; cloth, $1.00. The University of Chicago Press, Chicago, Illinois, 1937.

* * *

BOOKS REVIEWED

THE MANAGEMENT OF OBSTETRIC DIFFICULTIES, by Paul Titus, M.D., Obstetrician and Gynecologist to the St. Margaret Memorial Hospital, Pittsburgh; Consulting Obstetrician and Gynecologist to the Pittsburgh City Homes and Hospital, Mayview, and to the Homestead Hospital, Homestead, Pennsylvania; Secretary of the American Board of Obstetrics and Gynecology. With 314 illustrations including four color plates. The C. V. Mosby Company, St. Louis. 1937. Price $8.50.

This book is written for the physician who is meeting in daily practice obstetrical difficulties and emergencies. It is not arranged in the standard textbook manner but is a collection of chapters dealing with clinical entities under the general heading of sterility; difficulties in diagnosis of pregnancy; complications of pregnancy; complications of labor; obstetrical operations; complications of the puerperium; the new-born infant and general considerations including analgesia and anesthesia, and intravenous glucose and blood transfusion. Frequent cross-references are made to chapters containing related subjects.

On controversial matters, Dr. Titus gives his opinion of the best procedure to use for, as he says, the patient's emergency will not wait the settlement of arguments.

Dr. Titus has not made a dividing line between obstetrics and gynecology and includes chapters on pelvic floor damage, post partum uterine misplacements, tumor growths complicating pregnancy, ectopic pregnancy, electrosurgical coagulation and conization for post partum cervicitis and the treatment of sterility.

In the preface the scope and purpose of the book is well described: "Obstetric work is peculiar in two respects; its difficulties are largely preventable, but its emergencies must be promptly met. This requires early recognition of impending trouble, and obstetric experience. The chief purpose of a book of this type should be to provide swiftly available information to supplement one's judgment respecting the proper management of such emergencies."

* * *

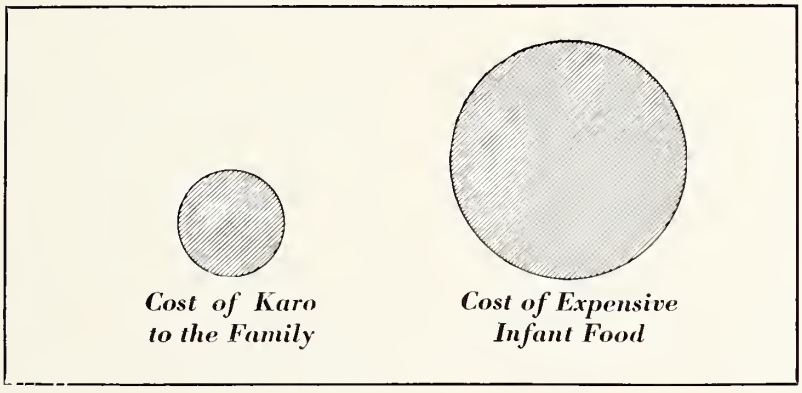
NUTRITIVE ASPECTS OF CANNED FOODS. Containing scientific facts on commercially canned foods. Published by the American Can Company; compiled by the Nutrition Laboratory in the Research Department of the Company.

This is the second book of its kind published by the American Can Company. The earlier book, "Facts About Commercially Canned Foods," was published in 1936. This second book is a general summary of facts about tin containers and canned foods. It is divided into two sections. The first deals with the preservation of foods, dietary requirements, the mineral and vitamin conservation in canned foods, infant nutrition, and the safety of canned foods under modern methods of packing. Section two describes the manufacture of the cans, including tinplating, enameling, etc., and discusses the canning procedure from the raw materials through the sealing of the cans and the heat processing. The book also contains an appendix of reference takes, including charts on human energy expenditures, dietary requirements, mineral and iodine content of various foods, and analyses of canned foods of many kinds.

(Continued on page xxiv)

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BOOKS REVIEWED

(Continued from page xxii)

NEW AND NONOFFICIAL REMEDIES, 1937. Containing Descriptions of the Articles Which Stand Accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1937. Cloth. Price, $1.50. 557 pages, LXIV. Chicago: American Medical Association, 1937.

The annual editions of this volume contain all that the busy physician needs to know concerning the newer preparations which he is daily importuned by the detail men of the pharmaceutical manufacturers to use. The remedies listed and described here have been examined and found acceptable by the Council on Pharmacy and Chemistry, the deliberative body charged by the American Medical Association with the performance of this service for the practitioner, who has not the time or means to make the determinations for himself.

Some new drugs have been added in the 1937 edition, the descriptions of which will be found in the groupings to which they belong. There are some noteworthy changes in classification. The various vaso-constrictors, benzedrine, ephedrine, epinephrine and neo-synephrin, have been grouped together as phenylalkylamine derivatives under the heading "Epinephrine and Related Preparations." This terminology is in keeping with the Council's policy of avoiding therapeutically suggestive names. Another similar change is the abandonment of the classification "Medicinal Foods" and substitution of a chapter under the title "Vitamins and Vitamin Preparations for Therapeutic and Prophylactic Use" in the previous edition. The consideration of other classes of food preparations was long ago transferred to the Council on Foods. The chapter "Organs of Animals" which has heretofore included only endocrine preparations, have been expanded by transfers to this heading of the chapters Liver and Stomach Preparations, and Insulin.

The book contains general articles, descriptive of the classification under which the various drugs are listed. According to the preface, more or less thorough-going revisions have been made of the articles: Arsenic Compounds; Compounds Containing Trivalent Arsenic; Compounds Containing Pentavalent Arsenic; Bismuth Compounds; Epinephrine and Related Preparations; Iodine Compounds; Iodine Compounds for Systemic Use; Mercury and Mercury Compounds; Pituitary Gland; Salicylic Acid Compounds; Serums and Vaccines; Antipneumococcic Serums; Silver Preparations; Tannic Acid Derivatives.



WHAT?

The French Lick Convention of the Indiana State Medical Association

October 4, 5, 6, 1937

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

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CONTROL OF SYPHILIS*

I. THE REASONS FOR A NEED OF CHANGE IN OUR PRESENT SYSTEM

ERNEST O. NAY, M.D.

Terre Haute

Historians are divided in regard to the origin of syphilis. One group called the pre-Columbianists believes that some of the disease entities and pathological findings in the remains of early peoples were due to syphilis. During the first and second centuries, Celsus differentiated between hard and soft lesions of the genitalia. Aneurysms were common in the early centuries among the Romans.

The other group, called the Columbianists, believe that the disease was brought back from Haiti and San Domingo by Columbus and his men from their first voyage. Regardless of which group is correct, the first document in which treatment was discussed was written by Diaz de Isla in 1510. The term syphilis was used first in 1530 by Girolamo Fracastoro.

Although advances were made in the clinical studies of this disease, no advances were made in its treatment until the Twentieth Century. Mercury and iodides were the remedies used.

In 1905 Schaudin and Hoffman discovered the treponema pallidum and established it as the causative organism of syphilis.

In 1907 Wasserman made the serological discovery that bears his name.

In 1909 Ehrlich discovered salvarsan and a little later neo-salvarsan. Although bismuth had been recognized as a useful drug in syphilis, it has not been used extensively until the last ten years.

Up to the last year, syphilis has been considered the black sheep of the communicable disease family, to be talked of only in private, and then with hushed tones. Thus, for 400 years, because of the silence and indifference of lay and professional men, the public has hardly heard the name of syphilis let alone any enlightenment as to the damage it is doing. Syphilis has been given such names as the "social disease," "bad disease," etc., but the newspapers, radio, and magazines would not even use or allow the name to be used. However, a large number of our population, at least 10 million, have heard about it because they have it. Parran makes the statement, "that one in every ten adults in the U. S. A. has or has had syphilis," and that now under observation there are at least 683,000 cases; also, he states there are 518,000 new cases of early acquired syphilis which means that one case of syphilis is contracted every minute of the day, and of this number 100,000 are children below the age of 20, and 1100 are between 11 and 15. This number does not include the thousands who seek advice from quacks and other unauthorized sources, and in some communities these sources have been found to treat twice as many patients as the physicians.

The widespread opinion that syphilis is prevalent only among the criminals, filthy, poor, delinquents and degraded, and that this predicament represents their just award, has been in a large measure responsible for the lack of interest in the suppression of this great plague. Until this distorted view has been corrected, progress in its control must be hampered. Syphilis in this country is yearly on the increase, and it pervades all strata of society. Only about 50 per cent of the cases are acquired in venery and of these the clandestine love affairs contribute as many as the commercial prostitutes. The other 50 per cent are innocently infected either in marriage, congenitally, or by the use of eating and drinking utensils, the services of diseased nurse maids, barbers, beauty shop operators, and infections by doctors and nurses obtained from patients.

If ten per cent of all the people in the United States have syphilis, then Indiana probably has 300,000 cases, and about 20 per cent, or 60,000, are children under 20 years of age. Yet to date only 30,000, or one-tenth, are under treatment. If this is correct, then nine-tenths of the syphilitics of this state are spreading the disease and only one-tenth are receiving treatment. Syphilis cannot be eradicated unless changes are made in our present system.

There are reported 21,000 new cases of syphilis in Indiana each year; goodness knows how many

*Symposium presented at First District Medical Society meeting in Evansville, June 17, 1937.

there are that are not reported. At a meeting of the Syphilis Committee for Indiana the question of reporting cases by the private physician was discussed. Nearly all the statistics that we have are sent in by the various clinics in the state. I would judge that the percentage sent in by the family doctor would be very, very small. There is very little cooperation between the private physician and the public health officer when it comes to syphilis. Public opinion has been given as the reason for this. If this is so, will there be more cooperation in the future by educating the people?

The prevalence of syphilis in the industrial group has been completed by the American Social Hygiene Association as follows: barbers 13 per cent, railroad employees 11.7 per cent, unemployed laborers 8.4 per cent; laborers, 6.1 per cent, rural population 1 per cent, milk handlers 4 per cent, clerks 3.5 per cent, merchants 3.7 per cent, domestics 17 per cent, and University of Wisconsin students 0.2 per cent. Statistics show that syphilis is perhaps the greatest single contributing factor to crime, delinquency, insanity, and physical and mental inefficiency.

In the United States last year 40,000 people died from cardiovascular disease due to syphilis, and in Indiana alone 2,000 died from this disease, this latter figure being 20 per cent of all heart trouble deaths. Most of these deaths could have been prevented by early treatment.

Syphilis causes a high per cent of the blindness in this country, and some statistics say that 25 per cent of all blindness is due to this plague.

Syphilis causes 5,600 deaths each year from mental diseases. There are 8,600 first admissions each year to our insane hospitals. In Indiana at the present time there are 18,700 people being treated in these institutions for syphilis.

Syphilis of pregnancy, taking the prenatal clinic reports that are sent in, ranges around 8.3 per cent. The congenital cases taken from the same source are 3.5 per cent. It seems that the system we are now using could be improved upon.

The prenatal clinics of this country have been beneficial to the pregnant woman to a large degree, but those clinics which have not performed routine Wassermanns have not done their whole duty. Routine Wassermanns or Kahns should be done on all pregnant women whether in a clinic or at home, if we intend to eradicate congenital syphilis. No other single procedure will bring to light a greater number of patients who are so infected. Recognition of these cases provides the opportune time for advising the patient regarding her immediate requirement and future conduct. Congenital syphilis is largely preventable.

The marriage laws are such in the State of Indiana today that practically anyone who is above the age limit can marry. Very few questions are asked. Many syphilitics marry and bring into the world children who have congenital syphilis. I understand that the State of Illinois and some other states are requiring Wassermanns. Why should Indiana not do this? There would be very few who would not be able to have negative blood tests if they persevered in the continuous treatment prescribed by their physicians.

There are 13 free clinics and 5 state institutions in the State of Indiana at which the treatment of syphilis is given. The clinics are supported by the cities in which they are located. The state supplies one-half of the neoarsphenamine and bismuth for the indigents; no tryparsamide is supplied. Many of the clinics are not adequately supplied with dark field equipment so that the early case of syphilis can be diagnosed. Many do not have facilities to perform lumbar punctures.

It has been said that 55 per cent of the physicians in private practice do not treat syphilis, and of the remaining 45 per cent only a very small per cent know how to do a dark field examination; thus, many early cases of syphilis have been allowed to progress to the secondary stage before the diagnosis was made. Our medical schools, hospitals, clinics, societies, and periodicals are to blame for not allotting more time and space to the question of syphilis.

SUMMARY

The public has not been educated in regard to the problem of syphilis.

The private physician has neglected his duty by not reporting his cases, and as a result the public health officer has not been able to prevent the spread of this disease because he did not know the contacts.

Congenital syphilis is preventable. Routine Wassermanns and adequate treatment of every pregnant woman would practically eradicate this type of syphilis.

Many of our clinics and private physicians are not supplied with dark field equipment, and thus early cases are not diagnosed. If we want to control syphilis, we must diagnose and treat the early cases before the Wassermann is positive.

2. SYPHILIS CONTROL AMONG THE FOOD HANDLERS OF SOUTH BEND

F. R. NICHOLAS CARTER, M.D.
South Bend

National publicity on the subject of syphilis has been so intense in nature throughout recent months that at the present time it takes the spotlight of all the infectious diseases.

Just why a disease which is responsible for five hundred thousand reported cases of syphilis annually in the United States should not be combated is a question which can not be answered. Incidentally, if five hundred thousand cases of syphilis are reported annually in the United States, it is probable that there are five hundred thousand new cases which are not reported. Why is a disease, which produces such a terriffic amount of destruction to the human body as syphilis, allowed to continue?

A small health province the size of South Bend can contribute its part to the national control movement by activity in its own health jurisdiction. With this thought in mind, at the beginning of the current year the health department of South Bend entered into an agreement with the State Board of Health to carry out an extensive campaign requiring all food handlers to undergo physical examinations, and in addition to have Wassermann tests.

A program of this type entails much office work. First of all, food handling establishments were notified that all food handlers would be required to take food handler examinations as provided by state law. Grocery stores, restaurants, cafes, bakeries, markets, butcher shops, candy stores, etc., were informed that all employes in addition to the regular food handler examination would have to submit to a Wassermann test. All of these examinations were done in the office of the family physician. The family physician was allowed to charge whatever fee he saw fit. The majority of the doctors charged one dollar for the physical examination and blood test. At the present time some six thousand food handlers have been examined.

It has been stated in national propaganda that one individual in ten is infected with syphilis. Our own experience has been less than this. Our records show that only one in twenty has a positive Wassermann reaction. However, to place this in different figures, no less than two hundred and fifty people who had positive Wassermanns are handling food in South Bend. Very few of these people had ever been under treatment before and many of them were absolutely ignorant of the fact that they had the infection.

It might be of interest to you to know something concerning the organization of the food handler examination campaign.

Three State Board of Health food-handler-examination forms were given to each applicant. These forms were to be filled in by the doctor. We required that only doctors from our own St. Joseph County or those doctors whose signatures were known to us do the examinations. In other words, we wanted to be sure that the applicant did not sign the name of an imaginary doctor to the forms.

After the blood report was returned from the state laboratory, and upon the receipt of a properly filled in food handler's certificate from a reputable physician, each applicant was requested to go to the health department office where a food handler's card was issued. Each applicant was requested to bring a small photograph of himself. The desirability of this procedure can be understood when you realize that one form has often in past years been used for virtually all of the employes of a single food handling establishment. It is now possible for the city food inspector to go into any food establishment and check the employes accurately as each one must have a food handler card which has his picture attached.

As 1937 figures are computed it is possible to see a cross-section of the food handling population of South Bend insofar as syphilis is concerned. Between five and six per cent of the food handlers of South Bend had positive Wassermann reports. It, therefore, becomes a matter for our own health department to make such rules and regulations as we see fit concerning the future care of those food handlers infected with syphilis. The following policy was adopted:

Whenever an individual was willing to place himself in the hands of some reputable member of the medical profession for treatment of his infection, the individual was permitted to go on working. The advisability of this procedure can be appreciated when you realize that the individual is working and is, therefore, usually able to pay for his treatment. It is also a fact that the individual who has a positive blood test returns to the doctor who made the original examination. This man is in an advantageous position to sell future treatment.

In this manner we have placed in the hands of the physicians of St. Joseph County some two hundred and fifty cases of syphilis for treatment which had not previously been under treatment.

Some discussion has occurred concerning how much treatment should be given in order to make a man or woman non-infectious. The South Bend Board of Health has adopted the policy of the State Board of Health of requesting twenty shots of neosalvarsan and twenty shots of the heavier metals—bismuth or mercury. When an individual has had this amount of treatment and can obtain a signed statement to this effect from his physician he will no longer be considered infectious. However, our own department will conduct a very intense campaign to encourage treatment until the patient is pronounced cured. Concerning this matter, I still feel that the health department should insist on treatment until cure has been effected.

The matter of indigency must be considered. The State Board of Health is willing to supply drugs to indigent cases for treatment in the office of the family physician. So far, only one doctor in our town has asked for drugs to care for an indigent patient. Our public health clinic functions for cases which are financially unable to get treatment elsewhere. About fifty food handlers are being treated at the public health clinic at the present time.

So far as a follow-up system is concerned, once each month our clinic investigator calls each physician to inquire if their food handler patients are coming in regularly for treatment. If the doctor states that a certain food handler is not coming in for treatment then the investigator immediately gets in touch with the individual. Every encouragement is given this persons to return for treatment. If he or she refuses to be treated then the de-

partment of health exercises its police power and tells the food handler that he may no longer work. Good salesmanship upon the part of the doctor when the patient comes in for his first treatment is responsible for the small number of delinquents. Our attitude has been to encourage individuals to go in for treatment rather than to force them.

South Bend is fortunate in that it has a city ordinance providing for the quarantine of all infectious cases of venereal disease. This ordinance is written in such a way that the quarantine is provisional. In other words, if the patient is willing to go in for treatment the quarantine is not effected. The ordinance reads as follows:

"Section 1, Be it ordained by the Mayor and Common Council of the City of South Bend, Indiana, that syphilis, gonorrhea and chancroid, known as the venereal diseases, are herewith declared to be contagious, infectious and communicable and dangerous to the public health.

"Section 2. VENEREAL DISEASES TO BE REPORTED. Any physician or other person who makes a diagnosis of, or treats, a case of syphilis, gonorrhea, or chancroid, and every superintendent or manager of a hospital, dispensary, or charitable or penal institution in which there is a case of venereal disease, shall report such case immediately upon blanks supplied by the Indiana State Board, and in the manner provided by the rules of the state board of health, passed by the Indiana State board of health, February 27, 1918, as recorded in the minutes of the meeting of said Board, and shall send report direct to said Board for State record and action.

"Section 3. PATIENTS TO BE GIVEN INFORMATION. It shall be the duty of every physician and of every other person who examines or treats a person having syphilis, gonorrhea, or chancroid, to instruct him in measures for preventing the spread of such disease, and to inform him of the necessity for treatment until cured, and to hand him a copy of the circular of information, obtainable for this purpose from the State Board of Health.

"Section 4. INVESTIGATION OF CASES. The city health officer and the board of health shall use all reasonable means to ascertain the existence of, to investigate all cases of syphilis, gonorrhea and chancroid within the limits of the city of South Bend, Indiana, and to ascertain the sources of infection. The city health officer and the board of health and their deputies are hereby empowered and directed to make such examinations of persons reasonably suspected of having syphilis, gonorrhea, or chancroid, as may be necessary for the carrying out of these regulations; Provided—patients under the care of physicians and whose cases have been reported shall not be examined or investigation made except upon request of the attending physician.

"Section 5. PROTECTION OF OTHERS FROM INFECTION OF VENEREAL DISEASED PERSONS. Upon receipt of the report of a case of venereal disease, it shall be the duty of the city health officer and board of health to institute reasonable measures for the protection of other persons from infection by such venereally diseased person.

"(a) The city health officer and board of health are empowered and directed to quarentine persons who have, or are reasonably suspected of having syphilis, gonorrhea, or chancroid whenever, in their opinion, or in the opinion of the state health commissioner, quarantine is necessary for the protection of the public health. In establishing quarantine the city health officer and the board of health shall designate and define the limits of the area in which the person known to have, or reasonably suspected of having syphilis, gonorrhea, or chancroid and his immediate attendant are to be quarantined, and no person other than the attending physician shall enter or leave the area of quarantine without the permission of the city health officer and board of health.

"No one but the city health officer and board of health shall terminate said quarantine, and this shall not be done until the diseased person has become non-infectious as determined by the city health officer and board of health or their authorized deputy through the clinical examination and all necessary laboratory tests, or until permission has been given to do so by the state health commissioner.

"(b) The city health officer and board of health shall inform all persons who are about to be released from quarantine for venereal disease, in case they are not cured, what treatment shall be taken to complete the cure. Any person not cured before released from quarantine shall be required to sign the following statement after the blank spaces have been filled to the satisfaction of the city health officer and the board of health:

I,———— residing at———— hereby acknowledge the fact that I am at this time infected with ————and agree to place myself under the medical care of————within————hours, and that I will remain under treatment of said physician or clinic until released by the health officer and board of health of South Bend, Indiana, or until my case is transferred with the approval of said health officer and board of health to another regularly licensed physician or an approved clinic.

I hereby agree to report to the city health officer and board of health within four (4) days after beginning the treatment as above agreed, and will bring with me a statement from the above physician or clinic of the medical treatment applied in my case, and thereafter will report as often as may be demanded by the city health officer and board of health.

"Section 6. It shall be unlawful for druggists or other persons unless holding a license to practice medicine, to diagnose, prescribe or recommend medicines for the treatment or cure of aforesaid venereal diseases.

"Section 7. It shall be unlawful for any person having the supervision or control of any place open to the public to display or permit to be displayed any sign, poster, advertisement or notice of any kind calling attention to any medicine, formula or preparation to be used in connection with the pre-

vention, treatment or cure of any venereal disease.

"Section 8. Any one violating any of the provisions of this ordinance shall, upon conviction, be fined in any sum from ten to fifty dollars or imprisonment for ninety days or both at the discretion of the Court.

"Section 9. This ordinance shall be in full force and effect from its passage and legal publication."

In the fifteen years that I have lived in South Bend the venereal disease quarantine card has never been used. However, it is a powerful agency to the health department in seeing that patients come in for treatment and a good weapon to use as a threat.

It might be of interest to you to know that the State Board of Health was willing to report the results of the Wasserman tests to the board of health office rather than to the doctor who had made the examination. The advisability of this procedure can be seen when it is realized that the patient himself, should he return to the doctor and find that his blood was positive, would place the doctor in a very embarrassing position. In other words, if the doctor reported the case to the board of health he would probably lose the patient. His patient might even insist that the case not be reported to the department of health, fearing that it would become public information and therefore embarrassing. It is a much simpler method to have the report come to the department of health, and for the department of health then to notify the doctor. As a matter of fact, we gave a sealed letter to each person whose blood was not satisfactory and told each one that he must take the letter to the doctor who had made the original examination before a food handler's card could be issued. The letter was worded something like this:

The bearer, John Jones, had the following report from the state laboratory:

WASSERMANN	KAHN	KLINE
4+	4+	4+

It will be necessary for the patient to go under treatment before a food handler's card can be issued.

(Signed) BOARD OF HEALTH.

This procedure places any unpleasantness on the health department and puts the doctor in an advantageous position to sell treatment to his patient. He is not only in an advantageous position to sell treatment, but is backed up by the board of health who will refuse to allow the patient to work unless he is under treatment. This system has worked out very well.

Too much cannot be said about the state board of health's fine cooperation in performing the Wassermann tests. Tubes were supplied at the rate of from five hundred to one thousand each week. These were given to doctors or food handlers upon request. All red cards used in the blood Wassermann containers were labeled, "Food Handler Examination."

From a community view point, the most wholesome cooperation has been received. The public is thoroughly in accord with the department of health in having done this type of service. Taxpayers should be made to realize that syphilis can be stopped at its beginning, rather than at its final stage. Tax reduction is of infinite interest to every citizen. Remember that Max Bahr of our own Central Insane Hospital says that if syphilis were stopped at its beginning rather than at the time that insanity occurs, the state could be saved $500,000 annually in the care of insanity alone.

The general public is more than anxious to insist that food handlers with syphilis undergo treatment. The state law concerning food handlers is an aid in requiring syphilitics to undergo treatment. However, a state law concerning the quarantine of persons infected with syphilis is of great importance in getting patients under treatment and keeping them under treatment until they are noninfectious or cured.

To enumerate the outstanding features which have presented themselves to us in our campaign, the following may be mentioned:

1. Diagnostic Wasserman tests available to all. It is my opinion that the State should subsidize the local laboratories. Only laboratories which measure up to certain standards should be designated for this service. So far as treatment check Wassermanns are concerned, these may be charged for by the local laboratories. It should be the function of the State to ferret out the cases of syphilis and then to insist that treatment be given in the office of the family physician.

2. To create public feeling, through educational information, (press, radio, etc.), that syphilis is curable. To back this up by police power vested in the health department to insist that treatment be followed by all infected persons. Refusal to allow food handlers to work, refusal by large corporations employing great numbers of laborers to allow these laborers to work if unwilling to be treated, and finally quarantine all cases refusing to be treated.

3. To relegate to oblivion the fear that has grown up in the medical profession that the confidential relation of patient and doctor is being violated when a case of syphilis is reported to the local or state health department. It is infinitely more important to treat the patient before he becomes insane, paralyzed, or has any of the other end results of syphilis.

The State, if given the knowledge of the presence of the disease, can insist upon treatment. The patient, himself, benefits most by this type of program.

3. SYPHILIS IN PRIVATE PRACTICE

A. F. WEYERBACHER, M.D.
Indianapolis

It is my intention to discuss briefly the ordinary treatments of syphilis as used in private practice. It has been presumed that private practice allows one to individualize his treatment to an extent that is not possible in clinic practice; however, I believe

that early syphilis is treated as well in a clinic as in private practice.

With the recent advent of newspaper and magazine publicity concerning syphilis, it now seems that we see more early syphilis than we did a few months ago. Also we see more latent syphilis and we have many more requests for blood tests for syphilis in people who have recently been made aware of its prevalence. It is to be hoped that this interest will not be allowed to lag.

First let us consider prophylaxis against syphilis. The three methods of prevention are mechanical prophylaxis, chemical prophylaxis, and chemotherapeutic prophylaxis. Mechanical prophylaxis is accomplished by means of a condom. This protects the part of the genitalia (the coronary sulcus) adequately and gives good protection, for the coronary sulcus is the site of ninety-two per cent of the primary lesions on the male genitalia. Chemical prophylaxis is accomplished by the application of soap and water and 30 per cent calomel ointment. Many investigators think the early application of soap and water is adequate if used within a few minutes after exposure. In the Army and the Navy the additional application of the calomel ointment is required. There is no doubt that this measure is one hundred per cent effective if used within twenty minutes after exposure. The third measure (chemo-therapeutic) has found favor principally in European houses of prostitution. The method used is the intramuscular administration of bismuth preparations over indefinite periods of time and of giving arsphenamine at stated times. This method is obviously not applicable to the general population. Education, now that we have an opportunity to speak in public, is our best means of saving many ignorant and careless boys and girls.

It cannot be urged too strongly that the early diagnosis of primary lesions, whereby we institute the treatment in the sero-negative stage, gives the doctor and the patient a tremendous advantage. When given an early case, we institute the continuous treatment, insisting that there be no rests, and keeping up the treatment for eighteen months. Bismuth and arsphenamine are alternated in courses, usually giving from 8 to 12 doses of arsphenamine and from 12 to 16 doses of bismuth at weekly intervals. Frequent urinalyses are made during treatment and dermatitis is always watched for. Early in the course of treatment the patient is informed that he must remember that a spinal test is a required part of this treatment. I regret to add that we are not always successful in persuading the patient to submit to the spinal test.

Stokes says: "*So effective is modern treatment for early syphilis that the following statements are possible*:

"a. In early syphilis 32 doses of an arsphenamine with appropriate heavy metal in 65 weeks by continuous, or 21 months by intermittent technic, give, *by the former* 1.1 per cent clinical and 5.6 per cent serologic relapse in 2 to 10 years; *by the latter*, 4.2 per cent clinical and 7.5 per cent serologic relapse in the same period. With irregular and inadequate treatment clinical relapse is 12.7 per cent, serologic 13.2 per cent. This includes the spinal fluid.

"b. The American statistics reworked to compare with Bruusgaard's untreated series show that in a 3 to 20 year observation 77 to 63 per cent of treated patients are Wassermann negative and symptom-free as compared with 24 to 33 per cent without treatment. Adequate treatment by an effective technic gives 96 per cent sympton-free patients in 3 to 10 years; no treatment 61 per cent. In 10 to 20 years, adequate treatment gives 74 per cent, no treatment 50 per cent.

"*The optimum treatment of latent syphilis* consists of one year of continuous and a second year of intermittent treatment (a total of 24 arsphenamine injections and 50 to 60 doses of bismuth), subject to considerations of age, sexual activity, and other complications. Continuous treatment the first year is essential for best results."

Cardiovascular syphilis must be treated with extreme caution. Again quoting Stokes:

"1. Cardiovascular syphilis developed in 1.6 per cent of 935 early syphilis patients followed from 3 to 10 years; in 6.7 per cent of 105 patients in 10 to 20 years; but not one who had had adequate treatment for early syphilis developed a serious cardiovascular lesion in the 3 to 20 year group.

"2. Adequate treatment improved the outlook of those followed one year after developing uncomplicated syphilitic aortitis, and prolonged the life of those who died, from an average span of 34 months to 85 months.

"3. Of patients adequately treated after detection of their aortitis, 63 per cent were found to be living, symptom-free, and arrested; of those inadequately treated, 49 per cent.

"4. Small arsenical dosage prolonged life 20 months longer than large.

"5. Preparatory heavy metal treatment is advised."

A few notes on the syphilis of pregnancy will not be amiss and I am giving figures released by the Cooperative Clinic Group (1936):

1. 78 per cent healthy children when treatment is begun *before* the fifth month.

2. 61 per cent healthy children when treatment is begun *after* the fifth month.

3. 91 per cent healthy children when 10 arsenical and 10 heavy metal injections were given *before* the fifth month.

4. With much arsphenamine and *little* heavy metal *before* the fifth month, 85 per cent healthy children.

With little arsphenamine and *much* heavy metal *before* the fifth month, 75 per cent healthy children.

With much arsphenamine and *little* heavy metal *after* the fifth month, 55 per cent healthy children.

5. *Hence, give the pregnant woman more arsphenamine; at least 10 injections, beginning before*

the fifth month. Add 10 injections of heavy metal (bismuth).

6. Habitually aborting syphilitic women (2 to 3 abortions each) produce seemingly healthy children in 69 to 78 per cent after treatment.

7. The pregnant syphilitic woman tolerates arsenicals much better than the nonpregnant syphilitic woman (1/2 as much dermatitis and 1/5 as much jaundice).

8. *Untreated seronegative* pregnant women — 28 per cent healthy children.

Treated in a *previous* but not present pregnancy —62 per cent healthy children.

Five times as many miscarriages in untreated as treated.

9. *Hence treat every syphilitic woman early and adequately in every pregnancy whether Wassermann positive or negative.*

10. *The adequately treated syphilitic woman may not be, but the untreated syphilitic woman certainly is a potential carrier of infection for the fetus up to 10 or 11 years after she acquires the disease.*

Syphilis in private practice comes to us in one of three ways:

(1) The case is referred as such by another doctor.

(2) The patient comes of his own accord knowing that he has syphilis.

(3) The diagnosis is made from clinical evidence present in a patient who has visited us for some urological condition.

In connection with the last group I wish to state that our commercial laboratories have been of great assistance. It has been our custom to have Wassermann examinations made by one of our commercial laboratories. Our agreement is such that we are at liberty to make tests on all of our cases without charge from the laboratory. These are labelled "diagnostic" bloods and we are perfectly free to request it of a patient since no charge is made. Our arrangement concerning Wassermann tests on patients under treatment for syphilis is that a charge of five dollars is made for each test. A patient under treatment, for which he is able to pay, has no added burden in expense, since the tests are not made at frequent intervals. This arrangement allows us to be free in making routine Wassermann tests and is evidently quite agreeable to the laboratory. A patient able to pay for syphilitic treatment is certainly able to pay five dollars for an occasional test. If using a private laboratory gives any advantage to a patient, he surely is entitled to it.

We use a private laboratory and expect to continue to do so, but we are heartily in favor of the State making free Wassermann tests on patients recommended for such by the family physician. Removing the necessity of administering a poverty oath is a step in the right direction. Allowing people the benefit of laboratory work that otherwise could not be asked for cannot greatly damage the incomes of the commercial laboratories, since the work probably would not be done if any charge were made. Has any privately owned laboratory tried the scheme of reducing fees for this type of work? It is possible, if they should do so, that their volume of work might increase to such an extent that it would be a profitable venture.

4. LEGAL ASPECTS OF CONTROL OF SYPHILIS

JUDGE JOHN W. SPENCER
Evansville

A lone lawyer, almost completely immolated by large numbers of the medical profession, might easily be tempted to go metaphoric, and allude to a lamb among the wolves, or a rose surrounded by thorns, but after all a guest does have certain obligations and I shall forbear any such comment, for certain phases of the two professions are so interrelated that each is necessary in the consummation of a desired program. Either profession, under ideal conditions, could control syphilis; the medical profession, providing all infected persons promptly reported for treatment; the law merely by executing or imprisoning and isolating every infected person. But conditions are not ideal in any sense. Consequently the sensible program, as in any other matter of public health, is one of cooperation between the professions, each contributing that which it can do best.

It is a matter of regret that the great American sense of prudery has for years drawn a black veil of secrecy over any discussion of venereal disease, and as a consequence ignorant superstition and erroneous ideas have substituted for education, so that even now not one in a hundred persons have any intelligent idea of syphilis, its effect or its cure. In this phase the doctors of America have been to blame. You had the knowledge, and consequently you had the duty to publicise and educate. Only recently have a few bold persons drawn aside the curtain of secrecy and started a program of education that has provoked discussion and accomplished much. You can put this down in the book, gentlemen, as gospel: syphilis can not endure the white light of knowledge. If every person in America had as much knowledge of syphilis as they do, say, of tuberculosis, the battle would be over. Unfortunately, the chancre is not a topic of discussion in the social world, and consequently goes unknown and unrecognized for what it is, and for what it prophesies. No health program, no matter how comprehensive, can be of much avail so long as thousands of persons contract and spread syphilis unconsciously. Scarcely a day passes that I am not required to commit some person to an institution for mental cases. The frequency of the plus Wassermann notation in these cases is sickening.

I have heard some discussion about requiring reports to be made of every case of venereal dis-

ease, and it would seem that this is an elemental precaution, and while I have no desire to appear critical of your profession, I am afraid that far too many doctors regard each case of syphilis as another piece of business in the office rather than as a matter in which the public generally has some interest. The public health offices can be efficient only within certain limits, that is in those cases which come to their attention, and to their clinics. It is imperative that syphilis be regarded both by the public and by physicians as a matter affecting the public as a whole, and this must mean correlation and complete cooperation between the medical fraternity and public health, and between each department related to public health.

I am informed that certain cities by ordinance require a report to be made of every venereal case. The spirit behind such an ordinance is excellent, but it amounts to but a futile gesture. The matter is for state regulation, and not municipal. The problem is general, not local. The answer is so obvious and easy of accomplishment that it is difficult to understand why it has not been done. Any legislature, adequately advised, would enact a statute requiring such reports to be made, and the police power of the state acting through ninety-two sheriff's offices in Indiana would enforce it. The time has come in Indiana when syphilis must be met as an open enemy, and no longer ignored as an unmentionable trespasser.

Mere rules of the State Board of Health, wholesome as they may be, can not cope with the situation. Enforcement becomes too difficult.

We have attempted in Indiana to prevent the marriage of persons suffering from venereal disease by requiring, as nearly all states do, the applicant to answer as to his condition, but because we are close to Kentucky, we have an added problem. Persons desiring to marry, and who cannot marry lawfully in Indiana, merely go to Kentucky, are married and return to Indiana to live. Now we have a statute which provides that one who goes to a foreign state to marry, intending to avoid the law of Indiana, commits a crime in Indiana. Through the cooperation of Dr. Miller and our prosecuting attorney we have broken up the practice, and the occasional violator is now promptly punished in the criminal court. But our statutes are not broad enough. We must have a law making it a misdemeanor for any person venereally infected to leave the state without consent of the public health officer locally in charge. This will serve until the time comes, and it will come, when federal statutes will prohibit movement of venereals across state lines. In other words, a syphilitic sufferer must by law be transferred from the category of a sick person into a classification of a public menace, and if and when the people of America realize that an over-sexed venereal is more dangerous than a mad dog, then the law will respond, and you who carry the curative burden can fight an open battle in an even fight.

5. THE PART OF THE HEALTH DEPARTMENT IN SYPHILIS CONTROL

MINOR MILLER, M.D.
Evansville

The various departments of health in our governmental set-up have been charged with the duty of safeguarding the public health. One of its chief functions is the prevention and control of communicable disease. In order to perform such functions it has been invested with police powers in matters pertaining to the public health. Therefore, in any program of control, our health officers are the enforcement officials to whom must be delegated the duty of making the program effective.

Providing that we have a health officer who is on his toes and anxious to do his duty, he must have information of the existence of the disease. We are all agreed that the only way to deal effectively with syphilis is to treat the disease. To stop its spread all cases must be treated. The health officer has the power to enforce treatment, but in order to do so he must have knowledge of the existence of the disease. In dealing with a malady that is known to affect at least ten per cent of the population, it certainly is within the domain of the health department to assist in discovering its whereabouts. Fortunately, in the case of syphilis, the cause is known, and laboratory methods are at hand for aid in its diagnosis. These methods are effective in the vast majority of infectious cases.

At the present time the Indiana State Board of Health provides laboratory facilities for the indigent case. Why only for the indigent case? Is the indigent more infectious than the patient with more of this world's goods? Does he travel more widely and disseminate his disease to larger areas? We all know that such is not the case, and that the reason that the laboratory services of the State have been restricted to the indigent is because of the fact that our private laboratories objected to the competition. As the situation now stands, whenever you suspect syphilis in a patient not in the indigent class, you must either talk him out of from two to five dollars to pay for a dark-field or Wassermann, or dig up the two to five bucks from your own pocket. Few pockets have been worn out due to this sort of digging. Many physicians have stated that they would like to use the Wassermann test as a routine procedure on all new patients but are restrained because of the cost to the patient. It has been advocated that all pregnant women have a Wassermann test made as early as the pregnancy is diagnosed, and another made about the seventh month. This is not done in the average case for economic reasons, or because the physician hesitates to suggest it to the patient. If it were possible to have the test made without cost it would be quite simple to draw the blood without specifying that a test for syphilis would be made.

Competition with the private laboratory in the

case of the routine Wasserman is untenable ground, since not many tests are being run, and those uncovered that could pay for subsequent control tests would more than compensate for the loss. In any event we are not uncovering the cases with the present system, and it is up to the health departments to provide facilities for diagnosis. This would require more laboratory service in this State, especially for darkfield examinations, since the technique for delayed darkfield examinations is too complicated to give satisfactory results.

At the Washington Conference on Venereal Disease Control Work in December, 1936, there was a lengthy discussion on the reporting of cases. Finally it was decided to recommend that cases be reported by some system other than by name and address, because it was felt that secrecy must be maintained in regard to the identity of the patient. No satisfactory reasons were advanced, or statistics given that would tend to show that the man in private practice keeps a secret any better than the average health officer. There is one thing that such reporting does do with absolute finality, and that is to completely stop the health department insofar as that particular case is concerned. Suppose that a case of typhoid fever was reported as "number one" with no address given and the information that he had been drinking water and milk at so many places that it was impossible for him to remember them, and then "number two" case was reported with the same sort of information, and then "number three," and so on until quite an epidemic occurred. How much would you expect your health department to accomplish with the aid of such information? That is essentially what may be expected from the reporting of venereal diseases by number. Probably nearly 100 per cent of the cases of typhoid are reported, but a considerably smaller proportion of the cases of syphilis can be expected to be reported.

However, we do not handle typhoid in that manner. Each case is reported with the name and address, and an expert gets on the job, and it is not uncommon to find that the source of the disease is some milk handler, the existence of whom the immediate patient has no knowledge. Due to the intimate contacts between the syphilitic and his source of infection, such sources should be no harder to find than the typhoid source.

Since the health department is charged with fostering the good health of the public, certainly the least than can be asked is that it be informed of the existence of a communicable disease, with full particulars as to who is infected, and the contacts from whom the disease may have been acquired, as well as those to whom it may have been transmitted. This information is not desired for purposes of publication, but for the purpose of controlling the spread of infection. Health Department records of this sort are not open to public inspection, and can only be obtained on court order—the same rule of privileged communication holds as in private practice.

After the cases have been uncovered, it is then the province and duty of the health authorities to see to it that the menace to the public health is abated, and control the patient in such manner that he does not spread the disease. Since syphilis can only be controlled by treatment, it becomes the duty of the health official to enforce treatment. It is at this point that a large amount of quibbling arises. Some authorities insist that a patient is only a health department problem so long as he is dangerous to others, and that as soon as he becomes non-infectious to ordinary contact, his treatment problem becomes one of public welfare. The joker in this is in being able to tell when he has reached this state. The Indiana State Board of Health appears to have decided that 20 treatments each of neoarsphenamine and bismuth will produce this result. Concurrence in this opinion may be granted as to the majority of cases, though there is the occasional case which remains infective despite treatment, and the rare cases in which recurrences occur after treatment of this sort. Also there is to be considered the woman of child-bearing age, since it is the consensus of opinion that any woman who has ever had syphilis should receive active treatment during each succeeding pregnancy, regardless of whether she is apparently cured or not.

In passing it might prove interesting to know how many of the physicians who have children, and who subscribe to the theory that after any certain number of treatments the patient becomes and remains noninfectious, would give their consent to the marriage of their daughters to men in that condition? If, as may be surmised, a goodly number of the answers be in the negative, how about turning them loose for the other fellow's daughter?

Another consideration in this phase of the subject is in the qualifications of the two departments to carry out the scheme of treatment. Which is to be preferred, a department composed of medical men, as is your board of health, with a medically trained officer in charge, as the law requires your health officer to be; or a department of many welfare boards, none of whose workers are trained in medicine, and with a directing head trained more or less in sociology or politics, according to the whim of those vested with the appointive power?

Syphilis is predominantly a disease contracted by young persons, the highest age incidence being in the early twenties. For this reason, it has been estimated that three-fourths of those affected are unable to pay for adequate treatment. This must be provided for them, and since the health department is best able to supervise such treatment, it should be in their hands. Such is provided for, and must have been contemplated by those responsible for the creation of our boards of health, since

they gave them the name of Boards of Health and Charities, though public health is never charity.

It is also the duty of the health department to carry on a campaign for the enlightenment of the public on matters pertaining to syphilis. Information is woefully inadequate, and is one reason why our results have been no better in the past. Unfortunately we do not get the patient early. Too much stress cannot be given to the fact that the first few days are the golden days in treatment, when ultimate cure is considered. All too often the early symptom is not believed to be anything of consequence until those early days have passed. Anything even slightly suspicious must send the afflicted one to his physician or health department, if we are ever to conquer this plague. It is not the duty of the health department to interfere with the treatment of the patient in efficient, private hands, but it is the duty of the health officer to seek contacts, and step in when the patient becomes negligent. He has and must exercise authority in enforcing treatment in all cases. This will mean that the private patient will be required to take his treatment regularly, or be reported to the health officer, who in turn will either enforce treatment or quarantine.

Let it be clearly understood that it is not advocated that private practice be interfered with in any way. Those desiring to send specimens to the private laboratory should be free to do so. It is not desired that those able to pay for private treatment should be treated at public expense. In fact, provisions should be made to require the patient of ample means to take and pay for private treatment and control Wassermanns. Diagnostic work only should be provided by the State Laboratory for those able to pay.

Space does not permit further elaboration of the duties of the health department in the control of syphilis. However, a great step forward in successful accomplishment will have been made when all cases are reported, investigated and compelled to take treatment. The health department must receive and give cooperation to private practice. It must do those things that private practice cannot do in the way of policing the job, and supplement the services that cannot be supplied from private sources. Any system of control that does not have cooperation of health departments and the private physician, backed by an enlightened judiciary, is doomed to fail.

PROGRAM FOR THE

FRENCH LICK SESSION

IN THIS ISSUE

EVENTRATION OF THE DIAPHRAGM

C. L. WILLIAMS, M.D.

Logansport

Eventration of the diaphragm, according to Cecil,[1] indicates a defect which is characterized by a thinning or relaxation of one leaf of the diaphragm which occupies an abnormally high position. Textbooks usually mention the condition and devote a paragraph or two to the most salient features, mentioning the fact that it is rare in its occurrence, and that the weight of evidence points to its being congenital in origin.

OCCURRENCE

The first known cases reported, according to Verbrycke,[2] Clopton,[3] Reifenstein[4] and Withington,[5] were reported by J. T. Pyle in 1784, and by the writings of J. L. Petit published in 1790; the first occurred in a new-born infant, and the second in an adult female. Both of these cases were discovered at autopsy and were considered as cases of hernia. According to Verbrycke and Clopton, it was Cruveilhier in 1849 who coined the name "eventration" for this condition. Neumann[6] points out that Grosser found eight cases in the literature up to 1899, and that all these cases were incidental findings at autopsy. Korns[7] in 1921 reviewed the literature and was able to collect 65 cases, 22 as proved and 43 as probable. During the last few years quite a good number of cases have been reported, among them being Wood and Wood,[8] Bamber,[9] Golob,[10] Lord,[11] Blackford and Booth,[12] and Wheatley.[13] The interesting fact that was observed in a perusal of the literature was that a large number of the cases cited had been discovered during x-ray examinations, which was the method of discovery of the case presented in this paper. From this it would appear that eventration of the diaphragm is not as rare as it was

[1] Cecil, R. L.: A Textbook of Medicine. W. B. Saunders Pub. Co., 1931, p. 909.

[2] Verbrycke, J. R.: Eventration of Diaphragm. *Surg., Gyn. & Obs.*, 40:3 (March, 1925), p. 415.

[3] Clopton, M. B.: Eventration of Diaphragm. *Ann. Surg.*, 78:2 (Aug., 1923), p. 154.

[4] Reifenstein, E. C.: Eventration of Diaphragm. *Amer. J. Med. Sc.*, 159 (1925), p. 668.

[5] Withington, P. R.: Eventration of Diaphragm. *Boston Med. & Surg. Jour.*, 190:7 (Feb., 1924), p. 244.

[6] Neumann: Zur Frage der Relaxatio Diaphragmatica. *Deut. Med. Woch.*, 45:33 (Aug. 14, 1919), p. 1919.

[7] Korns, H. M.: Diagnosis of Eventration of Diaphragm. *Arch. Int. Med.*, 28 (Aug., 1921), p. 192.

[8] Wood, W. B., and Wood, A. G.: Congenital Elevation of Diaphragm with Reports on Six Cases. *Lancet*, 2 (Aug. 22, 1931), p. 392.

[9] Bamber, J. M.: Eventration of the Diaphragm. *Med. Cl. of No. Am.*, 2:3 (Nov., 1927), p. 771.

[10] Golob, M.: Right Diaphragmatic Eventration. *N. Y. Med. Jr. & Record*, CXXIV (Oct. 29, 1926), p. 473.

[11] Lord, F. T.: Eventration of the Diaphragm. *Arch. Surg.*, 14, part 2 (Jan., 1927), p. 316.

[12] Blackford & Booth: Eventration. *J. A. M. A.*, 98 (March 12, 1932), p. 883.

[13] Wheatley, F. E.: Report of a Case of Eventration of Left Diaphragm. *Boston Med. & Surg. Jr.*, 197:3 (July, 1927), p. 87.

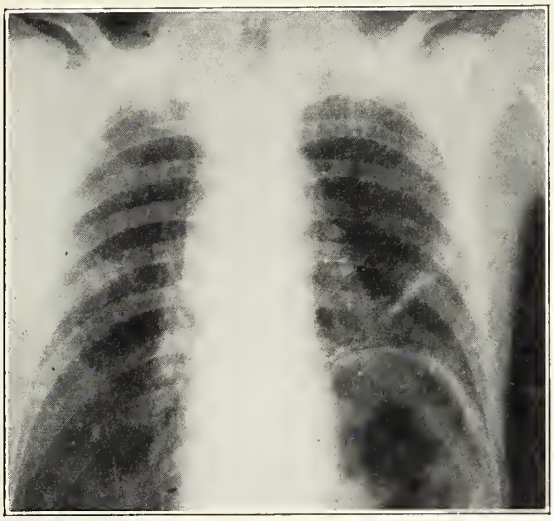


Fig. 1. Showing unbroken contour of left leaflet.

formerly assumed to be, and that the increase of the use of the x-ray for diagnosis has been responsible for the discovery of many of the cases, with the resultant growing literature on the subject.

CASE REPORT

A white male, 44 years of age, married, a marble worker by trade, presented as the chief complaints shortness of breath on exertion and some vague pains in the back radiating around to the left side of the chest. The patient had been quite healthy and a hard worker until the time of an auto accident on January 15, 1928, or eighteen months before the examination. At the time of the accident his auto was in a head-on collision with an interurban car and the patient received several contusions, lacerations and abrasions on the left side of the body. He was supposed to have received a punctured lung and four fractured ribs on the left side. The patient was unconscious for fourteen hours after the accident and was in the hospital for five days, after which he was removed about 175 miles to his home and was confined to his bed there for eight weeks. Following his recovery from the accident, he went back to work, but was only able to sit around in a chair and direct the work.

Dyspnœa had been present since the accident, but in the last few weeks prior to the examination, it had improved slightly. There was a cough present which had at times been productive of a muco-purulent material, but there had been no hemoptysis, night sweats, afternoon or evening temperature nor morning fatigue. There had been a loss of weight from 173 pounds to 142 pounds since the accident, and the patient was unable to regain his former weight. The appetite was poor, and the patient complained of gas on the stomach from practically any food that he ate. He had no constipation. On exertion there was palpitation with dizziness, and faintness so that the patient had to sit down. There were also occasional sharp pains over the precordium which lasted from two to three minutes, but they did not appear to be anginal in type.

The remaining systems were negative, and the family and social histories were irrelevant.

The physical examination showed a poorly nourished, worn and exhausted man, who was slightly dyspnœic and had an occasional cough. Face showed pallor, but there was no jaundice present. Temperature normal, pulse 92, and respirations 24 per minute. The blood pressure was 95/68. There were no physical findings of any concern aside from those found in the chest and abdomen.

The supraclavicular and infraclavicular fossæ were well marked. There was limitation of expansion of the left side of the chest. Litten's phenomenon was well marked on the right side and absent on the left. There was an inspiratory widening of the subcostal angle that was more marked on the left than on the right side. The lower left costal margin seemed to stand out more than the right, and seemed to be more or less fixed on respiration. This could be well shown by placing a yardstick across the costal borders, below the xiphoid process, so that the middle of the yardstick was in the midline of the body; during inspiration the right end of the yardstick would rise while the left end would go down, as though the left costal margin was serving as a fulcrum for the yardstick.

On percussion there was dull tympany over the whole left chest below the level of the fourth rib anteriorly, and the level of the eighth rib pos-



Fig. 2. Lateral view showing unbroken contour of left leaflet.

teriorly. The left border of the heart appeared to be about 1 to 2 cms. within the midclavicular line. The heart sounds were distant, muffled, and no murmurs were heard. There were decreased breath sounds over the above mentioned area of the left chest, and vocal and tactile fremitus were absent. The chest measured 34 inches on forced inspiration, and 32 inches on forced expiration at the level of the nipple line.

Laboratory findings: Hemoglobin, 85%; red blood cells, 4,500,000; white blood cells, 7,000 with a normal percentage in the differential count; urine analysis negative; repeated staining for tubercle bacilli failed to show the presence of any acid fast organisms.

X-ray: Stereoscopic plates of the chest showed a large air pocket in the lower left chest, the dome of which extended as high as the third rib in front and the fifth rib posteriorly. On filling the stomach with barium, it was found that the stomach was filling this space. Lipiodol was instilled into the left lung, and showed the substance of the left lung compressed above the stomach, but there were a few normal bronchi either anterior or posterior to the stomach. The heart and mediastinum were pushed to the right. Lateral plates showed a well rounded diaphragmatic dome on the level with the third rib anteriorly. This dome was symmetrical both when seen laterally and from the anteroposterior position. On flouroscopic examination the diaphragmatic movements on respiration were normal on the right side, while on the left side the respiratory movements were limited to about one-half inch. The cardia of the stomach extended high above the cardiac orifice. The duodenum was displaced upwards and to the left, being approximately in the midline.

COMMENT

Diagnosis: The differentiation of diaphragmatic eventration from diaphragmatic hernia is a rather technical process which requires, in addition to the examinations already performed, intragastric pressure readings, pneumoperitoneum, or exploratory laparotomy. The patient here reported refused to submit to any further tests for differentiation. It was only through considerable persistence that a four-year follow-up report of the case was obtained, and this report showed him still to be in practically the same condition as at the time of examination. It is well to point out here that pneumoperitoneum and exploratory laparotomy in these cases should be attempted with considerable care as both are rather formidable procedures, and Verbrycke[2] mentions the fact that merely opening the abdomen has caused death.

As to the interpretation of the x-ray plates, Wood and Wood[3] point out that in hernia, the patient being in the recumbent position when filling the stomach with barium, some of the barium passes into a pouch above the diaphragm; while in eventration, with the patient recumbent, the smooth contours of the fundus are outlined by

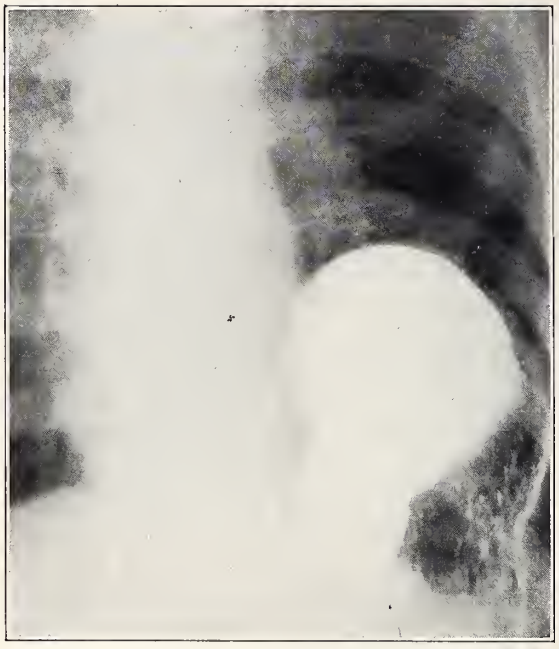


Fig. 3. Showing stomach filled with barium, the barium being higher than the level of the cardiac aperture.

the barium, and it will be noted that none of the barium will be found lying above the diaphragm. Further, in eventration with the patient placed back of the screen in the right oblique position the barium could be seen entering the cardiac orifice which was low, and appeared to pass upwards towards the fundus and then to pass downwards towards the pyloric end. Moore and Kirklin[14] bring out a point advanced by Morrison, that in eventration the upper level of the barium in the stomach always coincides with the esophageal opening when the patient is erect, whereas in hernia the upper level of the gastric content is likely to be above the plane of the esophageal aperture. Further, in eventration the line of the arch, which can be seen to advantage in the lateral view, is regular and unbroken, and no shadows of the abdominal viscera lie above it.

In applying these requirements to the x-ray examination of the case being reported, figure 1 shows the elevation of the left leaflet of the diaphragm, which is smooth, regular, and unbroken in outline, and shows the abdominal viscera beneath the elevated leaflet. Likewise figure 2, which is a lateral view of the chest, shows the same findings for the left leaflet as figure 1. It would then appear that these two plates fulfill the requirements as outlined above by Moore and Kirklin without the use of barium. In figure 3 is shown the outline of the stomach after ingestion of the barium, while the patient was still in the erect position. We were unable to get a barium enema

[14] Moore, A. B., and Kirklin, B. R.: Progress in Roentgenologic Diagnosis of Diaphragmatic Hernia. *J. A. M. A.*, 95 (Dec. 27, 1930), p. 1966.

in this case to show the position of the colon in the left upper quadrant. The findings on this plate could satisfy the requirements for eventration as set forth above by Wood and Wood, but would hardly satisfy the requirements as outlined by Moore and Kirklin for the use of barium in the stomach.

Considering all the facts in the case, it would appear that the weight of evidence is more in favor of eventration than of hernia because, first, this case shows the physical findings in the chest that have been reported by other observers reporting cases of eventration in the literature; second, the x-ray examinations appear to be more in favor of eventration than of hernia.

Etiology: Practically all authors on the subject of eventration are in accord that the condition is probably congenital in its origin; particularly is this noticeable in the English literature. Robinson[15] points out in the embryological development of the diaphragm, that the two lateral portions grow towards the median plane till they fuse with the dorsal portion, but in some cases, especially on the left side, the fusion is not completed. Korns[7] states that of 65 cases reviewed by him, 59 cases were on the left side of the diaphragm, while only 6 cases were on the right side. Thoma quoted by Reifenstein[4] further points out in favor of congenital origin the frequent findings of eventration in the fetus and the new-born, and the association of other congenital anomalies associated with eventration. From the foregoing it appears correct to assume that eventration is probably congenital in origin.

Trauma has not been considered very seriously in the etiology of eventration. Wheatley[13] reports a case in which there was a history of an auto accident two years prior to the onset of symptoms. He states, "It is difficult to believe the condition discovered was in any way attributable to trauma. It is far more likely that this congenital defect had not caused symptoms because the digestive function in youth and middle age was normal in spite of the handicap; and that advancing age with a general lowering of tone and digestive secretions resulted in fermentation and flatulence which would explain practically all the symptoms." Neumann[6] reports a case of eventration following a gunshot wound of the neck and shoulder on the right side. He further studied the literature, and reported from the literature a case from the clinic of Sauerbruch which was on the right side and followed phrenicotomy of the right phrenic nerve for progressive tuberculosis of the right middle and lower lobes. Neumann further refers to the literature on experiments on the diaphragm to support his conviction that the phrenic nerve is the more important factor in the production of relaxation of the diaphragm (eventration). Carnot and Caroli[16] report a case of eventration of the left diaphragm caused by a severe abdominal compression between two box cars. They say, "It is probable that, under the influence of the abdominal compression, the diaphragm has submitted, in turn, to a severe pressure . . . and that it has been able, ulteriorly neither to resume its place nor to fold by its tonus and its contractions the subjacent abdominal organs; . . . It is probable, moreover, that the diaphragm through traumatism has degenerated only little by little, either has been hemorrhagic or serous infiltration . . . or there has been a rupture of the muscular fibers or even of the nervous fibers of the phrenic." These authors mention another case of eventration in a sportsman who while riding a horse in jumping an obstacle had been struck violently on his abdomen by the pommel of the saddle. They comment on this case, "This case, which we have already published (*Paris Medical*, 1930), had been interpreted by us as a latent congenital eventration . . . Now we ask ourselves if actually it was a question of traumatic eventration, provoked by the violent epigastric shock, and similar to the case that we report today." Carnot and Caroli further discuss a case reported by Fatou et al. in 1928, in which a right diaphragmatic eventration happened unexpectedly six years after a severe fall on the right side which caused extensive serous ecchymosis and thoracic contusions.

Jwara and Dumitresco[17] report a very rare case of eventration of the right diaphragm following a subdiaphragmatic hydro-pneumocyst which followed surgical removal of a hydatid cyst of the liver. They state that besides the factor of the distension, a paralysis of the diaphragm has been caused through irritation of the nearness of the cyst, which has entailed a lasting diaphragmatic deficiency equivalent to a truly acquired eventration. Hoffschulte[18] reports a case of dextrolateral elevation of the diaphragm following a gunshot wound. One of the noteworthy findings of this case was that the bullet must have torn a hole into the diaphragmatic muscle. He further concludes that the elevation may be attributed to the adhesions and perhaps to a partial paralysis of the diaphragm.

From the foregoing references to the literature, it would appear that trauma as an etiological factor in eventration of the diaphragm deserves more consideration than the English literature accords to it.

The patient whose case is reported in this paper had always been a healthy man, doing heavy lifting work, until the time of his auto accident. In

[15] Robinson, A.: Cunningham's Textbook of Anatomy (Fifth Edition). Wm. Wood & Co., New York, 1921, p. 74.

[16] Carnot, P., and Caroli, E.: Diaphragmatic Eventration. *Paris Medical*, 1 (April 7, 1934), p. 310.

[17] Jwara, E., and Dumitresco: Subdiaphragmatic Hydropneumocyst . . . Causing Eventration. *Ment. Rev. Med. Chir. d mal du Foie*, 7 (March and April, 1932), p. 105.

[18] Hoffschulte, F.: Dextrolateral Elevation of Diaphragm Following Gunshot Wound. *Deut. Med Woch*, 30 (July 24, 1934), p. 1983.

this accident he suffered marked trauma to the whole left side of the trunk, with four fractured ribs and a punctured lung, and he was unconscious for a period of 14 hours. Following the accident he had been in poor health with symptoms referable to the circulatory and gastro-intestinal systems, and his condition remained practically the same for a period of more than four years. Consequently, it would appear logical that trauma was the most important etiological factor of this case of eventration. The modus operandi of trauma causing this case of eventration can not be definitely determined in this study as histological preparations were not available. There is the possibility that the trauma may have caused a bruising or crushing of the phrenic nerve in the neck. Another possibility is that there may have been an interruption of the intercostal innervation by the four fractured ribs. There is still a further possibility that the puncture of the lung may have led to some pathological process as hypoplasia or aplasia of the lower lobe of the left lung, and this in turn has resulted in the stretching of the left leaf of the diaphragm by the intra-abdominal pressure.

CONCLUSIONS

1. A case has been presented showing an unusual anomaly of the left leaflet of the diaphragm, which, after careful study of the available facts, appears to be an eventration of the diaphragm.

2. The increased use of x-ray has revealed a greater number of cases of eventration of the diaphragm.

3. Etiology has been discussed showing the possibility of trauma as a factor with the various possibilities as to the modus operandi of each.

THESE OUTSTANDING DOCTORS
WILL BE SPEAKERS AT THE
FRENCH LICK SESSION:

Joseph Brennemann, M.D., Chicago.
Louis Arthur Buie, M.D., Rochester, Minnesota.
Karl A. Menninger, M.D., Topeka, Kansas.
Bernard Henry Nichols, M.D., Cleveland, Ohio.
John S. Lundy, M.D., Rochester, Minnesota.
Frank H. Lahey, M.D., Boston, Massachusetts.
Sumner L. S. Koch, M.D., Chicago.
Frank J. Heck, M.D., Rochester, Minnesota.
Jesse O. Arnold, M.D., Philadelphia
Albert C. Furstenberg, M.D., Ann Arbor, Michigan.

PLAN TO BE AT FRENCH LICK
WITH THEM —
OCTOBER 4, 5, AND 6!

EVALUATION OF MATERNAL AND CHILD HEALTH SERVICES IN INDIANA

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As a part of the May Day health program of 1937 the Bureau of Maternal and Child Health of the Indiana State Board of Health, in cooperation with the Bureau of Vital Statistics of the Indiana State Board of Health, the U. S. Children's Bureau, and the County Health Officers of Indiana, made an attempt to evaluate child and maternal health services in the various counties of Indiana, based on a survey of existing child and maternal health conditions in the local counties to promote child and maternal health.

The following statistics were obtained from the Bureau of Vital Statistics, showing a comparison of the infant death rate per 1,000 live births in the various counties, and the maternal death rate based on the rate of deaths per 1,000 live births, and compared to that, the general average of these deaths as reported by the U. S. Children's Bureau of the Department of Labor for the entire United States.

The infant death rate per 1,000 live births throughout the United States is 56.0, while the maternal death rate per 1,000 live births is 5.8. As seen in the following table (Table No. 1), there are fifty-two counties showing these deaths to be comparable with or below that of the average for the entire United States.

COUNTIES SHOWING INFANT AND MATERNAL DEATH RATES COMPARABLE WITH AVERAGE FOR UNITED STATES — 1936

County	*Infant Mortality Rate*	*Maternal Mortality Rate*
Adams	43	2.7
Allen	37	5.0
Boone	41	3.4
Brown	55	0
Carroll	19	0
Clinton	30	0
Daviess	44	5.5
Dearborn	40	3.3
Decatur	28	0
DeKalb	53	2.5
Delaware	45	4.0
Dubois	41	2.5
Fountain	41	3.7
Franklin	30	0
Fulton	43	3.9
Gibson	56	4.1
Howard	54	1.2
Hamilton	39	0
Hendricks	40	0
Jackson	54	2.0
Jennings	39	0
Johnson	35	0
Kosciusko	38	4.2
Lawrence	54	4.0
Marshall	27	2.2
Martin	52	0

*Chief of Bureau of Maternal and Child Health of Indiana State Board of Health.

Monroe	43	1.4
Montgomery	51	4.6
Morgan	31	0
Newton	27	0
Noble	40	2.6
Owen	32	5.4
Parke	19	0
Ohio	22	0
Orange	51	0
Perry	56	2.9
Porter	40	3.4
Posey	25	3.5
Putnam	22	0
Rush	24	0
Scott	36	0
Shelby	49	2.4
Starke	49	0
Saint Joseph	38	3.1
Switzerland	41	0
Tippecanoe	43	4.2
Tipton	37	3.7
Union	40	0
Wabash	48	5.1
Wells	42	3.2
White	45	0
Whitley	54	4.9

THE FOLLOWING COUNTIES ARE **NOT** FAVORABLY COMPARABLE TO THE AVERAGE OF THE UNITED STATES IN ONE OR BOTH INFANT AND MATERNAL DEATH RATES:

County	*Infant Mortality Rate*	*Maternal Mortality Rate*
Bartholomew	69	6.4
Benton	66	0
Blackford	37	8.2
Cass	57	3.7
Clark	70	2.1
Clay	39	6.9
Crawford	63	0
Elkhart	41	6.0
Fayette	62	11.9
Floyd	58	12.6
Grant	68	3.2
Greene	61	3.8
Hancock	61	0
Harrison	66	0
Henry	65	0
Huntington	52	9.6
Jasper	30	10.0
Jay	81	3.0
Jefferson	39	7.0
LaGrange	63	4.5
Lake	43	6.0
Laporte	55	6.3
Madison	58	4.5
Marion	58	5.4
Miami	51	9.8
Pike	38	10.4
Pulaski	88	0
Randolph	76	5.1
Ripley	31	11.4
Spencer	62	0
Steuben	70	0
Sullivan	48	8.3
Vanderburgh	66	9.4
Vermillion	65	0
Vigo	64	5.4
Warren	61	0
Warrick	67	0
Washington	66	7.3
Wayne	50	8.1

There are 52 counties of the 92 counties in Indiana which have an infant and maternal death rate of average or below that of the general death rate of these two classifications throughout the United States. There are 27 counties which have an infant death rate higher than that of the United States; there are 19 counties which have a maternal death rate higher than that of the United States. For these specific counties, refer to the above table and to maps Nos. 1 and 2.

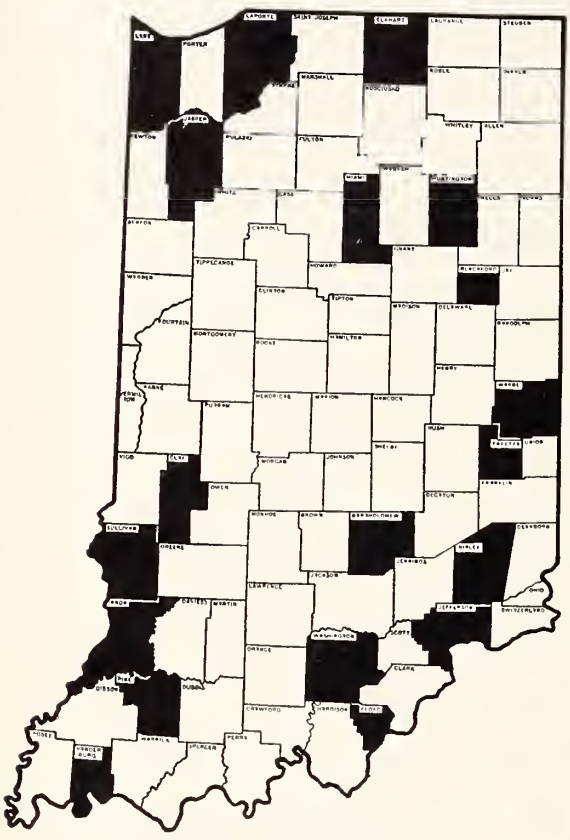
The following survey was made from the reports received from the county health officers of 54 counties throughout the State of Indiana.

LOCAL PUBLIC HEALTH AGENCIES PROVIDING MATERNAL AND CHILD-HEALTH SERVICES

	Yes	*No*
Local organized public-health unit:		
City	30	22
County	10	41
District	6	45
I. Public Health Staffs:		
Full-time health officer	4	50
Public-health nurses	32	21
Physicians: full-time	6	47
part-time	39	13
II. Maternal and Child-Health Services:		
Maternal Hygiene:		
Prenatal clinics or conferences conducted by physicians and nurses	6	48
Home visits by public-health nurses	19	35
Classes for expectant mothers	8	46
Provision for care at time of delivery	12	42
Supervision of midwives	2	52
Portpartum visit by nurse and examination by physician	19	35
III. Infant and Pre-School Hygiene:		
Child-health conferences conducted by physician and nurse	11	40
Nurses' home visits to instruct mothers	25	29
Group instruction of mothers	7	47
Immunization against diphtheria and smallpox	41	13
Medical examination before entering school	14	40
IV. Health of School Children:		
Nursing supervision	27	27
Periodic medical and dental examination of school children	31	23
Follow-up to secure correction of defects	23	31
Health-education program	22	33
Medical examination of young persons going to work	11	43
V. Health Education Program on Maternal and Child Health:		
Distribution of publications	52	2
Postgraduate courses on care of mothers and children for physicians, for nurses, for dentists	52	2
Education program for general public	52	2
VI. General Public Health Services Important for Child Health:		
Approved water supply	54	0
Safeguarded milk supply	54	0
Supervision of foods and drugs	54	0
Communicable disease control	54	0
Sanitary disposal of waste	54	0
Supervision of school sanitation	54	0

MAP OF INDIANA SHOWING COUNTIES WHICH HAVE A MATERNAL DEATH RATE HIGHER THAN AVERAGE FOR THE UNITED STATES DURING THE YEAR 1936

(Counties in black have death rates higher than U. S. average)



Map No. 1.

MAP SHOWING COUNTIES IN INDIANA WHICH HAVE INFANT DEATH RATES HIGHER THAN THE AVERAGE FOR THE UNITED STATES DURING THE YEAR 1936

(Counties in black have death rates higher than average for U. S., 1936)



Map No. 2.

SUMMARY

I. Public Health Staff:

There are many organized public health units in the cities, but it is plain to be seen from the foregoing that organized health units throughout the counties and in the rural areas are few as compared to our neighboring states. (The State of Ohio has 50 full-time health units; the State of Michigan has 36 district health units, having full-time health officers and other personnel including sanitarians, engineers, nursing services, and a clerical staff).

Indiana has but four full-time district or county health officers. There seems to be a generally equal balance of counties having supervised public health nursing services and those not having such a service. Another article will be published in the near future showing how the distribution of nurses has been markedly increased since the establishment of the Bureau of Maternal and Child Health of the Indiana State Board of Health in May, 1936.

II. Maternal and Child Health Services

Indiana has few prenatal clinics or conferences. These again are usually conducted in the larger cities, practically none being held in the rural areas.

Thirty-five counties have no provision for home visits or assistance to doctors by public health nurses. There are little or no educational facilities for classes of expectant mothers in the State of Indiana. Only 12 counties show any provision for home delivery assistance to the general practitioner. Indiana has very few midwives operating in the State. Many counties lack any provision for postpartum visits by the nurse, or examinations by the physician for indigent cases.

III. Infant and Preschool Hygiene

Indiana, unlike many other states, has few or no child hygiene conferences. Most child health conferences are confined to such larger cities as Indianapolis, Fort Wayne, Terre Haute, Muncie, Elkhart, Gary and Evansville, with practically no provision for these conferences in the rural districts. The State seems adequately divided as to provision for home visits by nurses for instructions to mothers in child hygiene. However, group instruction to mothers, which is just as effective and more time-saving, is scarcely practiced throughout the State. It is surprising to learn that there still remain 13 counties in Indiana which make no provision or effort to carry on immunization campaigns against

diphtheria or smallpox, from a standpoint of public health. There are 14 counties in the State of Indiana which make some provision for preschool examinations, while 40 counties have no such programs.

IV. Health of School Children

Again we find adequate nursing supervision for the school children throughout the larger cities and towns of Indiana, but very little nursing supervision in the schools of the rural areas. The same is true for periodical examinations of school children. As has been shown for many years, where there are periodic medical and dental examinations, very little effort is made for follow-up correction of the physical defects. Thirty-three counties report no health education program being carried on in their schools. In only 11 counties is there an attempt made to examine young people entering factories or other industrial occupations.

V. Health Education Programs

This report shows that only two counties have failed to avail themselves of the health education program offered by the Indiana State Board of Health, such as carrying on such activities as distribution of literature, post-graduate courses for physicians, nurses, dentists, and general health educational programs for the lay public.

VI. General Public Health Services Important for Child Health

Reports from this survey indicate that Indiana has adequate provisions for the safeguarding of water and milk supplies, and for school sanitation and waste disposal.

CONCLUSION

From the foregoing report it can be concluded that there is vast opportunity for the improvement of maternal and child health services throughout the State of Indiana; that the improvement for these services along medical and dental lines has not kept pace with the opportunities and improvements in health services along the lines of engineering and sanitation.

In most instances there is adequate provision for available maternal and child health services in the cities and larger towns, but there are practically no such provisions existing in the strictly rural areas.

It is the purpose of the Bureau of Maternal and Child Health of the Indiana State Board of Health, with the cooperation of the general public and of the Indiana State Medical Association, to improve these services, especially for the rural areas.

This could best be accomplished by appointing a committee for maternal and child health activities from each local county medical society, to cooperate directly with the Indiana State Board of Health and the Indiana State Medical Association in making these services available.

URINARY TRACT SYMPTOMS AS THEY INFLUENCE THE DIFFERENTIAL DIAGNOSIS OF DISEASES OF THE ABDOMINAL ORGANS*

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Indianapolis

The symptoms of diseases of the urinary organs and of the intraperitoneal viscera are sufficiently variable and inconstant that their differential interpretation may be difficult. Only those variations in the symptoms and findings due to primary disease of the urinary organs which may contribute to such a confusion in the diagnosis are considered in this discussion.

The relative frequency of local abdominal symptoms due to disease of the intraperitoneal viscera and the vital importance of their correct interpretation, as compared to the infrequency of referred abdominal symptoms the result of primary urinary tract disease, have contributed in major part to the tendency to minimize the clinical importance of the latter. The following review is presented with the hope that it may create a more inquisitive interest in urinary tract diseases by the internist when he is confronted with symptoms or findings which suggest a disease of the intraperitoneal viscera, but which data are insufficient to fully satisfy his requirements for such a diagnosis.

PAIN

Pain is the most frequent and important symptom of urinary tract disease requiring interpretation in the differential diagnosis of abdominal disease. A pain localized over the kidney and accompanied by costovertebral tenderness on the corresponding side, with or without a ballottable mass; or a pain arising at a point along the course of the ureter and referred upward to the kidney region or downward into the bladder or external genitals, will immediately attract attention to the urinary tract. When, in addition, the urinalysis discloses a pyuria or hematuria, and there are micturitional disturbances present, the indications for a complete urological examination are definite and recognized. However, the pain and discomfort accompanying renal and ureteral disease may not be so typical of urinary tract pathology. Not infrequently there are sufficient variations in the presence of the pain and in the location of the point of its greatest intensity that a differenial diagnosis of its cause is difficult, and in reaching a final conclusion the urinary tract may not be considered nor investigated.

The irregularities in the pain caused by disease of the urinary organs may be grouped as follows:

1. There is a total absence of pain, local or referred.

2. All pain and discomfort are referred to areas outside the urinary tract.

* Read at the meeting of the Northern Tri-State Medical Association, Jackson, Michigan, April 12, 1937.

3. Both local pain and referred pain are present.

(1.) A diseased kidney may not give rise to loin or referred pain or discomfort sufficient to attract the patient's attention. The diseased organ frequently will not be suspected and if detected during life it will often be an accidental finding made during a complete clinical study. It may first be recognized upon post mortem examination. Such a silent kidney is not infrequent. Lower[1] found it present in 8.3 per cent of 637 cases of surgical disease of the kidney. It may occur in urinary calculous disease, in a renal neoplasm, in an open hydronephrosis, in a renal tuberculosis, etc., and the kidney may become totally destroyed.

(2.) When all the pain and discomfort are referred to regions remote from the normally located kidney, a disease of this organ may not be suspected. Even if other findings should indicate the presence of a disease in the urinary tract, its relation to the referred pain is easily overlooked. Lower states that in his series of cases, in 9.5 per cent the pain was not referred to the genito-urinary tract.

(3.) In many instances of pain referred to extra-renal areas, when it is the result of renal disease, there is also present loin pain. In 25 per cent of 160 of Cecil's[2] cases this combination of abdominal and loin pain was present. The referred pain may be but a discomfort, or it may be so prominent that it completely overshadows the loin pain. Cecil found that in his cases of both loin and referred pain, the latter was the dominating symptom in many, which rendered the clinical recognition of the importance of the urinary tract disease difficult.

The referred abdominal pain may suggest a gynecological difficulty when it is situated in the lower abdomen in the female patient, and a disease of the organs of digestion when it is referred to the abdomen proper.

The difficulty in differentiating pain, the result of urinary tract disease when referred to the abdomen from that due to disease of an intraperitoneal viscus is especially difficult because of the frequency of an abnormal position of the kidney, congenital or acquired, and the close anatomical relationship between the urinary organs and the intraperitoneal viscera.

When the pain of urinary tract disease is referred to the abdomen, it is centralized over the upper abdomen in approximately 60 per cent of the cases; in 30 per cent it is referred to the lower right quadrant, and in but 8 to 10 per cent of the cases will it be most marked in the lower abdomen. Pain thus referred to the abdomen will be caused by acute or chronic hydronephrosis or hydroureter, pyelonephritis, calculous disease, and acute suppurative disease of the kidney such as septic nephritis, cortical abscess, etc., with a relative frequency corresponding to the order mentioned.

In a series of 104 cases with disease of the kidney or ureter in which referred symptomatology was entirely gastrointestinal, Morrissey[3] found the kidney lesions were hydronephrosis and hydroureter in 30, mobility in 18, pyelonephritis in 30, renal stone in 12, renal tumor in 8, and polycystic disease in 6 cases.

In addition to the referred pain in the abdomen, the result of a urinary tract disease, there may be symptoms of a general abdominal or digestive disturbance. These may be sufficient to overshadow the referred pain in clinical importance. Renal or ureteral colic frequently is accompanied by nausea or vomiting and gaseous distention which contribute to the abdominal discomfort and all attention is directed toward the gastro-intestinal tract. This is especially likely to occur in young children when the primary urinary tract disease will be overlooked entirely. If a urinary tract infection with fever coexists, the elimination of a disease of an intraperitoneal viscus is more difficult. Chronic renal disease may, in addition to the referred pain, cause chronic reflex digestive tract symptoms which will closely simulate those of the indigestion which accompanies chronic disease of the gallbladder, of the stomach, of the duodenum or of the bowel. Also, disease of the left kidney, whether acute or chronic, may cause a referred sustained spasm of the descending or sigmoid colon when the spastic colon only may be recognized and the pain will be attributed to a spastic colitis[4] The writer has studied an instance of spastic descending and sigmoid colon, the result of irritation from a pyonephrotic right pelvic kidney, but has never observed this phenomenon in disease of a normally placed right kidney. Severe pain due to disease in the lower third of the ureter may be accompanied early in the process by abdominal symptoms suggesting a paralytic ileus or an intestinal obstruction.

Costovertebral tenderness upon palpation and a pain response to deep fist percussion over the diseased kidney will be present in most instances of the referred symptoms noted above. The detection of these two physical findings through closest clinical study and the interpretation of their relative importance based upon a knowledge of the possible variations in the symptoms of urinary tract pathology, are necessary if the physician is to avoid making an incorrect diagnosis of a primary abdominal disease in the presence of such referred pain.

Acute pain referred to the upper right abdomen due to a renal disease might be mistaken for the pain caused by a supposedly high-lying appendix, acute infection of the biliary tract, a perforated gastric or duodenal ulcer, or a hepatic or subdia-

[1] Lower, Wm. E.: Proceedings, Minneapolis Assembly, Inter-State Postgraduate Medical Association of North America, 1930, p. 172.

[2] Cecil, Arthur B.: *J. Amer. Med. Assoc.*, Vol. 75, November 6, 1920, p. 1239.

[3] Morrissey, John H.: *Rhode Island M. J.*, May, 1928.

[4] Scandurra, S., and Ghiron, V.: *Qt. Policlinics*, Nov. 15, 1932, p. 703.

phragmatic abscess. When the referred pain is chronic and of long standing it may simulate the pain due to chronic gallbladder disease, or to a gastric or duodenal ulcer.

Acute referred abdominal pain of renal origin when accompanied by nausea and vomiting and spasm of the pylorus due to viscera-motor reflexes, closely simulates the pain accompanying an emergency abdomen. In chronic referred abdominal pain due to urinary tract disease no such emergency is evident and there is abundant time for thorough investigation and study. There are more errors made, however, in interpreting chronic referred abdominal pain than the acute, when primarily due to renal disease.

The most frequent mistaken diagnosis in referred upper abdominal pain in urinary tract disease is to interpret it as an evidence of disease of the gallbladder or of the stomach. Bumpus[5] reports that of 162 cases of ureteral calculi with pain referred to the epigastrium, a diagnosis of cholecystitis had been made in 145, and of peptic ulcer in 7 cases. In most of such instances treatment is limited to medical measures which will frequently extend over a period of many months. Occasionally the gallbladder will be operated upon. Lowsley[6] found that of 39 patients with urinary tract disease who had been operated upon because of the referred abdominal pain, the gallbladder had been explored three times. One report of 177 cases of movable right kidney[3] stated that stomach symptoms were present in 68, and that in most instances these latter were the chief complaint of the patient.

Alglove concludes these gastro-duodenal symptoms so frequently accompanying nephroptosis are not entirely reflex, but that the displaced kidney, in pulling upon the colonic flexure, displaces it downward which causes traction upon the colica-media and mesenteric arteries, which in turn compress the duodenum. He considers that the pain, vomiting, epigastric distention, duodenal regurgitation, etc., are actually the result of direct mechanical compression of the duodenum.

Referred upper abdominal pain also may vary in its point of greatest intensity as the renal disease develops. This was true in the following case: a male, 29 years old, had had a tonsillitis three weeks before the onset of his renal infection, which latter was ushered in by a chill, severe general abdominal pain and bilateral loin tenderness. There was a splinting of the diaphragm and the intercostal muscles on the right side and, as a result, few breath sounds were heard in the base of the right lung. A developing pneumonia was suspected. Twenty-four hours later the lung symptoms had disappeared and the acute abdominal pain was more centralized over the gallbladder region, when a presumptive diagnosis of acute cholecystitis was made. Vomiting had been present from the onset of this acute illness, and by the morning of the third day the abdominal pain had shifted to a lower level and as the vomitus at this time contained some blood, it was now thought he might have had a ruptured gastric or duodenal ulcer from the beginning. The right loin pain and tenderness which had been present from the beginning of the illness suddenly increased in severity and the fullness in the right loin had by the fourth day become a definitely palpable mass in the right side. These findings, with a greatly increased blood nonprotein nitrogen, justified a diagnosis of a carbuncle of the right kidney with a secondary perirenal abscess. These were found present at autopsy, which further disclosed an acute parenchymal infection of the left kidney, and there were no organic changes present in the gallbladder, stomach or duodenum.

Referred pain to the lower right abdominal quadrant when due to urinary tract disease may be acute or chronic. In either instance it must be differentiated from the pain caused by an acute or chronic appendicitis. When the pain is acute, a potential emergency is present and a patient's life may depend upon correct diagnostic and surgical judgment.

When the pain appears to be somewhat too severe for the average acutely inflamed appendix; or when the fever is unusually high and chills are present with a leukocyte count which is more stable and lower than in most cases of acute appendicitis; when the gastric symptoms tend to be less marked; and particularly when there is no definite muscle rigidity over the appendix region, irrespective of the absence of pus or blood in the urine, of bladder symptoms, or of a suspicious shadow in the x-ray film, the clinician should suspect disease of the urinary tract as the cause of the symptoms and a cystoscopy with right ureteral catheterization should be done at once. Ureteral obstruction will be present if the symptoms are due to a stone, a stricture or a kinking from nephroptosis, etc., and varying amounts of residual urine—sometimes clear and at other times blood-tinged or infected—will be found above the obstruction. Aspiration of the retained urine will most often give immediate relief from the pain, a valuable finding in making a differential diagnosis. If the urinary tract is not at fault, the urological findings will be normal. In either instance thus only can a correct clinical diagnosis be made. The patient's life will not be further endangered because of such an examination and the time required will be less than one hour. Seldom will the emergency be so great as to forbid so little delay for so important a preliminary study.

In the presence of chronic referred pain in the lower right quadrant, due to urinary tract disease, there is abundant time for study of both the digestive and the urinary organs. The majority

[5] Bumpus, H. C.: *Proceedings, Staff Meet. Mayo Clinic*, 4:140:1929.

[6] Lowsley, O. S., and Twinem, F. P.: *J. Amer. Med. Assoc.*, 93: Nov. 23, 1929, p. 1614.

of diseases causing chronic lower right quadrant pain—whether it be primary or referred—when carefully studied, can be diagnosed. When the urinary tract is suspected a urological examination will seldom fail to say it is or is not diseased.

In one series of cases[6] in which an appendectomy had been done with a persistence of the original symptoms, the author found the urinary tract disease to be nephroptosis in 10, renal calculus in 5, ureteral calculus in 6, ureteral stricture in 7, and hydronephrosis in 3 instances. The symptoms of an acute or chronic pyelonephritis may be mistaken for those of an appendicitis.

The relative frequency of mistaking lower right quadrant pain or tenderness as an evidence of appendicitis, when it is due to urinary tract pathology, is very unsettled. In one series of renal and ureteral calculi, the author found that 27 per cent had had an appendectomy without relief of symptoms. In a group of 84 urological cases causing referred abdominal pain,[6] in 31, or 37 per cent of the series, the appendix had been removed without giving the patient relief. The writer's experience would indicate that mistaking the symptoms of an acute or chronic pyelonephritis for those of an appendicitis is doubtless more frequent than is generally appreciated.

Pain referred to the lower abdomen in the male patient because of urinary tract disease is most often due to ureteral stone, ureteral stricture, or to obstructive or inflammatory diseases of the bladder or urethra. The location of the bladder and the frequency of the disease of this organ in the male will immediately direct the internist's attention to this viscus in all instances of midline lower abdominal pain, when the cause of the symptom will be recognized.

The differentiation of such lower abdominal pain due to urinary tract disease from that caused by diseases of the internal genital organs in the female may, however, be extremely difficult. The findings are especially confusing when the urine is normal, as is frequently true in ureteral stricture, nephroptosis, submucous ulcer of the bladder, congenital renal pelvic dystopia, etc. While the relative frequency of ureteral stricture capable of producing pelvic pain is unsettled, that it does occur is generally accepted. Those most enthusiastic over its frequency assert it is often responsible for misdirected surgery in the female patient. Ureteral stricture, to the writer, is an over-rated disease in the production of pelvic pain which may be confused in a differential diagnosis.

To the contrary, the frequency of mistaking the symptoms of a Hunner ulcer of the bladder, as evidence of disease of the uterus and the adnexa, is greater than is generally appreciated. Such an ulcer of the bladder occurs most often in women. Its principal symptoms are a marked bladder frequency with a suprapubic distress when the bladder is distended, and a lessening of the bladder capacity.

These symptoms frequently vary in their severity at the menstrual period, most often being aggravated, occasionally improved. In many instances the disease will be accompanied by a distinct abdominal pain which will be referred to the lower abdomen or the lower right quadrant. The urine is usually free of pus, while it may contain microscopic blood. These urinary findings, with the location and character of the pain symptoms, conspire to lead the diagnostician into error, which can be prevented only by a knowledge that the symptoms of this disease may closely simulate those of disease of the female generative organs.

TUMOR MASS

In the presence of an abdominal mass, it is frequently necessary to eliminate tumor of the kidney. The difficulty in making a clinical differential diagnosis is increased when the tumor has attained large size before detection, or when, because of pressure upon surrounding structures, prominent symptoms may be referred to organs other than those involved.

In general the normally placed, moderately enlarged kidney, whether the enlargement is due to an infection, a stasis or a neoplasm, when it is palpated is felt distinctly in the loin and it appears to be situated near the posterior abdominal wall. Such a tumor is ballottable, and tends to have an oval, round inferior border. Its surface may be smooth or irregular, and it is usually tender to palpation. When very large, the mass truly appears to be abdominal in location when palpated, and the physical findings will closely resemble those of similar sized tumors of the surrounding abdominal organs. A congenital variation in the form or location of an enlarged kidney, such as horseshoe kidney, sigmoid kidney, dystopic kidney, etc., adds greatly to the confusion in its clinical interpretation.

Most often it is a tumor of the bowel, of the liver or of the gallbladder, of the adrenal, the spleen or the pancreas, of the mesentery, or a post-peritoneal extrarenal tumor, which must be differentiated from a tumor of the kidney. The location, size, form and consistency of these various tumors are not sufficiently characteristic to enable a differential diagnosis. Experience will but emphasize the hazard in attempting to make a differential diagnosis of such an abdominal tumor by palpation alone.

The special methods of examination of the gastrointestinal tract, of the gallbladder, of the blood, etc., which need not be enumerated, will usually enable a correct diagnosis. Not infrequently, however, there may still remain a doubt as to its identity. It is in these latter instances that a urological examination may be of help, through visualization of the upper urinary tract by retrograde pyelography with the patient in the supine and in the lateral position. The employment of

the lateral uretero-pyelogram in this type tumor case is comparatively recent and the instances where this added information has been secured have not been sufficient to warrant generalizations as to its worth. Yet, from the writer's experience, it has been found it will give added information concerning variations in the pelvic outline, the relative antero-posterior position of the kidney and ureter, and the degree of horizontal or vertical rotation of the kidney, which data, when considered with that secured by other means, has frequently enabled an accurate clinical diagnosis which otherwise would have been uncertain. The procedure is recommended to the internist or surgeon when he is confronted with such a diagnostic difficulty before the patient is subjected to an exploratory operation.

CONCLUSION

The principal indications for a urological examination in the differential diagnosis of abdominal disease are unexplained abdominal pain, digestive symptoms of obscure origin, and abdominal tumor. Hematuria and pyuria are cardinal manifestations of urinary tract disease and their presence in any amount in such a clinical picture must never be ignored. Yet urinary tract pathology may be present and be responsible for symptoms referred to areas remote from the kidney, and the urine may still be free of blood and be sterile. Likewise, under similar circumstances, the preliminary x-ray examination may be negative.

Pain caused by disease of the urinary organs varies in wide limits in its presence and in its location. It may be referred to the anterior abdomen and resemble that caused by a disease of an intra-peritoneal viscus. The misinterpretation of such referred pain and discomfort can be prevented best by a thorough understanding of its relative frequency and of the manner in which it may simulate disease of organs in regions remote from the urinary tract. Pain is always emphasized in the recital of a clinical history and it may be given such prominence by the patient as to confuse the uninformed physician in its interpretation.

Chronic digestive symptoms may be due to chronic disease of the kidney.

The differential diagnosis of an abdominal tumor mass is always difficult. Palpatory findings alone are insufficient to warrant a final conclusion in the majority of cases. Special methods of examination will frequently be required and the urologist can aid through elimination of a primary renal disease with enlarged kidney, and when extrarenal, in demonstrating the relations the tumor mass has to the urinary organs.

1711 North Capitol Avenue.

TREATMENT OF BRONCHIECTASIS

Case Report of a Two-Stage Lobectomy

By

PAUL D. CRIMM, M.D.
J. W. STRAYER, M.D.
and
CLARENCE S. BAKER, M.D.
Evansville

The treatment of non-tuberculous pulmonary suppuration presents to the medical profession an extremely difficult problem. The mortality rate in bronchiectasis and pulmonary abscess following some operative procedure is high. A wiser selection of cases and a standardization of surgical technic will undoubtedly diminish this rate, just as it has diminished the mortality rate in the surgical treatment of pulmonary tuberculosis.

SYMPTOMATIC TREATMENT

The prevention of bronchiectasis is still problematical because we have no specific cure for the disease other than the extirpation of the bronchiectatic lung. However, early treatment of catarrhal lesions in the upper and lower respiratory tract prevents chronic conditions which are either responsible for or associated with bronchiectasis. If adequate drainage of concurrent respiratory infection in children and young adults could be instituted after their acute exacerbations, the incidence of even mild bronchiectasis could be diminished.

To date, most of the non-operative procedures are symptomatic. Constitutional measures such as rest, diet and change of climate are beneficial. Climate alone often renders a mild case of bronchiectasis entirely symptom free. Rest and diet without change of climate is of little value. Other therapeutic measures, including the injection of lipiodol, are of no consequence unless they be psychological. Postural drainage practiced religiously is advantageous, especially when supplemented with bronchoscopy.

Bronchoscopic drainage renders symptom free mild cases of bronchiectasis and gives relief to the more advanced ones. In the former, the dilatations become dry, while in the latter the quantity of sputum production is decreased. Many patients have periodic attacks of coughing with little production of sputum and do not respond to any kind of treatment except bronchoscopy. We have found that cases of this type raise a small amount of tenacious pus, the predominant bacteria being staphylococcus. The injection of staphylococcus vaccine before withdrawing the bronchoscope is of value in diminishing cough and sputum production. Likewise, in moderately advanced cases of bronchiectasis, vaccine injection into the bronchial tree, providing it reaches the dilatations, aids in changing them from a wet to a dry bronchiectasis. The relief, if possible, of chronic bronchitis by some

(Continued on Page xxviii)

The French Lick Session

WE'RE OFF for French Lick again!

Let that be the slogan for every doctor and his wife in all Indiana. Pack your bags, guns and golf clubs, and come to French Lick prepared to enjoy one big house party all under one roof, as well as the up-to-the-minute practical scientific sessions. Have you ever visited the southern Indiana hills during Indian summer? October mornings, with the leaves beginning to turn, and the blue haze on the hills! Don't forget your wife, for she will be kept busy with a most interesting program. The members of the Orange County and Third District Medical Societies are busy planning for the eighty-eighth annual session of the Indiana State Medical Association to be held in the French Lick Springs Hotel, October 4th, 5th, and 6th. They will be on hand to give you a most royal welcome at America's famous health and pleasure resort.



Dr. George Dillinger
Chairman, Committee on Arrangements

HISTORICAL BACKGROUND

Tradition has it that early in the eighteenth century a French trading post and settlement was established at French Lick, but because of the hostility of the Indians, it did not long survive. The earliest written record is in the memoirs of General George Rogers Clark, who, in connection with his famous march to Vincennes and Kaskaskia, speaks of it as "a great resort for deer and buffalo, and their unusual tameness was a strong indication that they had been but little hunted here."

The first permanent settlement was made at French Lick about 1811 by immigrants from the Carolinas. About the time of the first settlement, a fort was established and garrisoned by the government for several years. That fort was located approximately at the site of the present French Lick Springs Hotel. Soon after the establishment of the fort, the Indians in the locality left never to return. Before leaving, they ambushed a man by the name of William Charles and attempted to scalp him but were driven away by the soldiers from the fort. By 1817 the population had increased to the point that a Justice of the Peace was elected, thus establishing the first form of civil government.



Air View of French Lick Springs Hotel

It was at first felt that the land surrounding the Springs could be utilized for making salt, and twelve sections of land were set aside for that purpose. After investigation, the Indiana Legislature petitioned Congress for permission to sell the land in fee simple. The land was sold at public sale to William A. Bowles, a physician, statesman and soldier. Dr. Bowles was one of those individuals who lives many lives in one. He was a tall, always well dressed individual, to whom everyone went for advice on every subject under the sun as well as for medical care. He was a Baptist minister and, after a dispute, was expelled from the church; a few years later he was ordained again. He entered the Mexican War as a captain and soon commanded the regiment. While in Mexico he became a close friend of Colonel Jefferson Davis, later the President of the Confederacy. Because of this close personal friendship, Dr. Bowles was an ardent sympathizer for the South, and was one of the ringleaders in the organization known as the Knights of the Golden Circle. For his activities, he was tried and condemned to death in 1863, but after the intercession of Governor Morton, Dr. Bowles was pardoned by President Lincoln.

Dr. Bowles built the first French Lick Springs Hotel prior to 1840. It was an ungainly frame building, but the fame of the waters soon became widely known and the hotel was well patronized. He soon conceived the idea of boiling down the water, so that his guests might carry home large quantities for home treatment and this was an immediate success. The Springs remained the property of Dr. Bowles until 1873, the date of his death. After his death, it passed into the hands of Dr. Samuel Ryan, who operated the Springs for a number of years. H. E. Wells and J. M. Andrew became the owners and managers in 1881 and they sold it to the French Lick Springs Company in 1887, and in 1891 it passed into the hands



Club House

Hill Golf

Course

of the French Lick Springs Hotel Company, the present owners. Near the beginning of the present century, the late Thomas Taggart gained control of the French Lick Springs Hotel Company, and under his management it has become world-renowned as a health and pleasure resort.

ORANGE COUNTY MEDICAL SOCIETY

The first recorded meeting of a medical society in Orange County was in the autumn of 1852, when eight physicians gathered in the office of Dr. Pierson in Paoli. A constitution and by-laws were adopted; also a code of ethics and a bill of charges. Dr. Pierson was elected president; Dr. Hazelwood, vice-president; Dr. Hoover, secretary; Drs. Reily, Botsell and W. F. Sherrod, censors. Others present were Drs. Lee, J. H. Sherrod, and McCann. This society soon died and no records of further meetings have been found. In October, 1875, the present Orange County Medical Society was organized, under the auspices of the Indiana State Medical Association, and has existed continuously until the present date.

POINTS OF INTEREST

French Lick is located in the scenic hills of southern Indiana, often referred to as the foothills of the Cumberlands. This section was untouched by the ice cap of the glacial age. There are many points of interest to the visitor. Sixty miles to the west is the famous old French town of Vincennes with its shrine to the conqueror of the Northwest Territory. In the western part of Orange and Martin Counties is the new



Japanese

Gardens



Pluto Spring

Hoosier National Forest. To the south is located the Nancy Hanks Lincoln State Park, the renowned monastery of St. Meinrad, and that wonderland town to children and grown-ups the world over, Santa Claus. To the north in Lawrence County is the well known Spring Mill State Park and around Bedford are located the largest quarries of building stone in the world. Southeast of French Lick is the historical old town of Corydon, first state capital of Indiana. The phenomenon of Lost River, flowing underground for many miles and rising to the surface at Orangeville, is known the world over. There are numerous caves in the neighborhood, the most famous being the Wyandotte and Marengo caverns.

PLACE OF MEETING

All meetings will be held in the French Lick Springs Hotel which is an unusually enjoyable place for conventions, a place where work and play may be happily blended. In addition to the natural attractions, the very ample accommodations offered make this an ideal place for such a meeting. The hotel, which is a fireproof brick structure, is operated on the American plan. The hotel accommodates more than 1,000 persons, with a convention hall seating 1,500 and smaller adjacent rooms seating 50 to 300 each. The meals are delicious and the portions generous, and will be remembered with delight. Every facility is present for a most successful meeting.

SPORTS AT FRENCH LICK

Golf at French Lick is known the world around, for the hotel maintains two eighteen-hole courses and keeps them in the pink of condition all through the year. Your tournament will be held on the famous Hill Course where so many tournaments of national interest have been held. A special golfers' luncheon will be held in the club house on the day of the tournament.

The new Trap and Skeet Club, with its little club house, is the latest addition to the sporting facilities at French Lick. It is located in a beautiful spot in the hills behind the hotel. Trap shooters are going to enjoy this ideal set-up. Other sports available are tennis, archery, swimming, and horseback riding through the picturesque 3,500 acres which comprise the hotel grounds.

ROUTES TO FRENCH LICK

The Monon, Southern, and Baltimore & Ohio Railroads all connect with French Lick. U. S. highway 150 and Indiana highways 37, 56, and 145 converge here, and are all excellent motor routes. A modern airport is ready to receive those who come by plane.

ENTERTAINMENT

The eighty-eighth annual session is going to go down in the history of the Association as the best party ever. The Monday evening stag is going to be one *Big Surprise,* and if you want to have the time of your life, you had better be there at 6:30 p. m.



Another View of Japanese Gardens



Tennis — and all the other sports you enjoy are available at French Lick

Come Early and Stay Late! . . . Make a Vacation of the Convention at French Lick!



Smiling darkies will give you efficient and courteous service from the time you reach the steps of the French Lick Springs Hotel

sharp! We won't say any more now, for that might spoil the whole thing.

At the same time the women physicians are having their annual gab-fest.

On Tuesday noon, the fraternities and other special groups will be having their annual luncheons, with all their marvelous scientific discussions. (Page Herman Morgan.)

On Tuesday evening comes the big banquet, and as we have said before, if you have never attended a banquet at French Lick—well, "You ain't seen nuthin' yet!"

The doctors' wives are going to be busy from the time they arrive until they leave. Starting on Monday afternoon there will be an informal, come as you are, get-together in the famous Japanese Garden, to be followed by a dinner and entertainment in the evening. On Tuesday will be the Auxiliary breakfast, to be followed by a luncheon-bridge party at the Country Club. And there is more to come, but we refuse to tell everything we know!

Can you afford not to come to French Lick? Pack your bag, bring your golf clubs, shot gun, tennis racket, riding boots, and your wife (be sure to bring her along) and be in French Lick early, for you will not want to miss one minute of the fun, or one minute of the splendid scientific program.

See You at FRENCH LICK!



Landing field available for those who come by plane



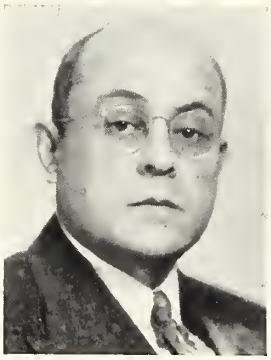
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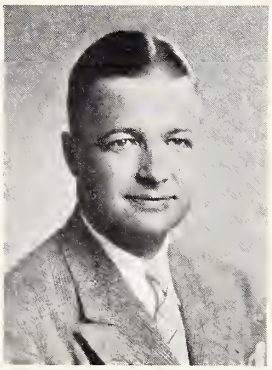
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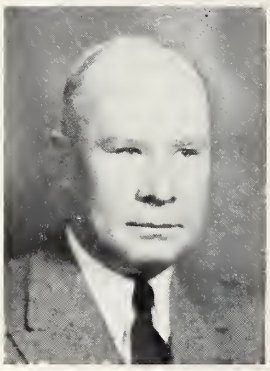
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Secretary, Eye, Ear, Nose and Throat Section
Fort Wayne



LILLIAN MUELLER
Secretary, Section on Anesthesia
Indianapolis



F. T. ROMBERGER
Editorial Board Member
Lafayette



ERNEST RUPEL
Editorial Board Member
Indianapolis



THURMAN B. RICE
Editorial Board Member
Indianapolis



PIERCE MACKENZIE
Editorial Board Member
Evansville



L. P. HARSHMAN
Editorial Board Member
Fort Wayne

Announcements

REGISTRATION

When you register, you will receive your official badge. WEAR IT!

* * *

Be sure to take your membership card with you when you register. It will save time and avoid inaccuracies in the spelling of names. If you have not received your membership card, present a receipt from your county society secretary and you will be permitted to register. *Please have your pocket cards with you to avoid delay.*

* * *

Register immediately upon your arrival. The registration desk will be conveniently located in the convention hall.

* * *

ANNUAL BANQUET

The annual banquet will be served at 7:30 p. m., Tuesday, October 5th, in the main dining room of the French Lick Springs Hotel.

Speakers will be Dr. Irvin Abell, president-elect of the American Medical Association, and Mr. Al Wynkoop, editor of the Lebanon Reporter.

* * *

ESSAYISTS

Essayists, please remember that all papers presented before the meetings of the Indiana State Medical Association become the property of the Association and, therefore, are not to be published or submitted for publication elsewhere than in The Journal *of the Indiana State Medical Association.* Your papers should be deposited with the reporter at the meeting immediately after it is read.

HOUSE OF DELEGATES

The first meeting of the House of Delegates will be held in the convention hall of the French Lick Springs Hotel at 4:00 p. m., on Monday, October 4th.

The second meeting—the breakfast meeting—will be held in the west dining room of the French Lick Springs Hotel at 7:00 o'clock in the morning, Wednesday, October 6th.

THE COUNCIL

The first meeting of the Council will be a luncheon meeting in the north dining room of the French Lick Springs Hotel at 12:30 p. m., Monday, October 4th.

The second meeting of the Council will be held in Parlor D of the French Lick Springs Hotel, immediately following adjournment of the second meeting of the House of Delegates.

FOR THE LADIES!

All women guests at the convention are invited and urged to participate in the program scheduled for women's entertainment. In the past, some women who are not actively affiliated with the Woman's Auxiliary have felt that entertainment plans did not include them. The Committee for Women's Entertainment wants every woman guest to understand that she is invited to attend every activity scheduled for the women. This is by no means an Auxiliary party—the entertainment is planned for *every woman guest attending the convention!*

* * *

FRATERNITY AND CLASS REUNION LUNCHEONS

Fraternity and class reunion luncheons are scheduled for Tuesday noon, October fifth.

Arrangements for such meetings should be made at once with Dr. L. H. Allen, Bedford, Indiana, or Dr. George Dillinger, French Lick. In writing to Dr. Allen or Dr. Dillinger, please give the time of the meeting and the number expected so that proper accommodations may be reserved for Tuesday noon.

* * *

The Indiana Roentgen Society luncheon meeting will be held Wednesday noon, October sixth, in the north dining room, with Bernard H. Nichols, M.D., of Cleveland, Ohio, as guest speaker.

* * *

The alumni of Phi Beta Pi will have a luncheon meeting on Tuesday, October 5, at the French Lick Springs Hotel.

* * *

HOTEL RESERVATIONS

Manager,
French Lick Springs Hotel,
French Lick, Indiana.

Please reserve hotel accommodations for the time of the convention of the Indiana State Medical Association, October 4, 5, and 6.

I expect to arrive.....

Room requirements.....
(single, double, twin beds)

Name.....

Address.....

Golf at French Lick



In the following article, Mel Smith, playing professional at French Lick Springs, developer of Lawson Little and other stars and a leading tournament player, advises how the Hill Course, scene of the PGA and other big tournaments, should be played this year.

Well, boys, steady your nerves and take a deep breath because we're going around a championship layout that's tried the skill of many masters. The round I'm describing is a perfect one. Some obstacles are bound to arise in tournament play, but here's wishing you abundance of luck in your tussle with the Hill Course, 6,490 yards of tough shooting with par 72.

No. 1—(418 yards, par 4)—This is a difficult par 4, requiring two fine shots to get on, the best you've got in the bag. It takes a well-placed drive, left of the center due to the fact the fairway breaks to the right, then under normal conditions a very fine two-iron to an elevated green which makes the shot deceptive.

No. 2—(385 yards, par 4)—Get off an accurate drive here or you'll run into trouble. This shot also should be placed left of the center for a slope to the right will kick the ball into the rough. It needs a very tricky pitch shot of about 130 yards to a well-trapped, terraced green.

No. 3—(390 yards, par 4)—A straightaway 230-yard drive is called for here, with a teaser of a second shot off a down-hill lie that takes a full five-iron to a fairly wide open green.

No. 4—(164 yards, par 3)—Don't be deceived by the shortness of this hole. It leads uphill to a well-trapped green and under ordinary circumstances, you will take a very full No. 3 on it.

No. 5—(455 yards, par 5)—This is probably one of the easiest par fives on the course. A well-placed drive and a spoon will reach the green quite easily. There's one trap across the fairway to be avoided.

No. 6—(205 yards, par 3)—This is one of the most difficult par threes on the layout. Under normal conditions, it calls for a full one-iron from the tee to one green over a canyon to a well-trapped green.

No. 7—(490 yards, par 5)—I consider this one of the best par fives. It needs a well-placed drive to the right of the fairway and a full brassie shot from a very tricky stance which must carry over an open trap squarely in the middle of the fairway, then a 125-yard pitch shot from a down-hill lie to an elevated green.

No. 8—(370 yards, par 4)—Although somewhat short, this hole calls for a well-placed tee shot, out to the right side of the fairway as it is out of bounds on the left side and this leaves a full three-iron over a very deep chasm that crosses the fairway. Lots of players under-estimate this shot because of the full carry. This probably will be one of the highest scoring holes, and I look for plenty of 7's or 8's.

No. 9—(348 yards, par 4)—This calls for a good drive to the left side of the fairway, as it opens up the green for the second shot, a good six-iron to an elevated green. The first nine is 3,223 yards in length and par is 36.

No. 10—(388 yards, par 4)—A well-placed tee shot to the right side of the fairway, then a good four-iron to an elevated green which is very deceptive and necessitates a much higher shot and longer carry.

No. 11—(330 yards, par 4)—This one's a breather, probably the easiest par four on the Hill Course.

ANNUAL GOLF TOURNAMENT

will be played on the Hill Course, at 9:00 a. m., Monday, October 4th. Eighteen holes, low gross and handicap medal play.

It calls for a fairly good drive and a pitch shot to a large green. No trouble at all in four.

No. 12—(405 yards, par 4)—This outstanding par four hole needs a well-placed drive to the right. Due to the contour of the ground, if the ball is not played this way, it will end up in the rough. The second shot requires a full four-iron to reach the green.

No. 13—(203 yards, par 3)—A full drive is necessary to cross a deep chasm fairway. The approach to the green is hogs-back, making it absolutely necessary to hit the green on the fly or the ball will head off either to the right or left.

No. 14—(595 yards, par 5)—Drive to the right side of the fairway, because there's a slight dog-leg to the left. On the second shot a brassie is played from a fairly steep downhill lie making the shot extremely difficult. The third shot is about 135 yards with a six-iron to an elevated doubled-terraced green, making the shot hazardous if the pin is on the lower terrace.

No. 15—(452 yards, par 5)—Due to the fact this is only two yards over the par 4 limit, it's a comparatively easy par five. The drive must be placed to the left side of the fairway, otherwise a very awkward stance will be found on the right side of the fairway. A four-spoon will reach the green with apparent ease, making a fairly simple birdie out of it.

No. 16—(130 yards, par 3)—A six-iron is needed here to reach a well-trapped green. This hole is greatly misjudged because its distance is deceiving. You're shooting from an elevated tee, which makes the shot far from simple.

No. 17—(370 yards, par 4)—The drive must be to the right of the fairway and the second shot takes a full three-iron across a swale to a somewhat elevated green. The green is not trapped.

No. 18—(394 yards, par 4)—This is a good finishing hole, both from the players' and gallery standpoint. It calls for a well-placed drive favoring the left side of the fairway, otherwise the second shot will be played from a down-hill lie. A full two-iron to an elevated green is needed here. The finishing nine is 3,267 yards with par 36.

The entire layout is so rolling and undulating that it makes play very tricky. The average player must avoid concentrating more on the shot to be played than the position it is to be played from. The greens have been improved, there's new sand in all the traps, and the course is in every way a championship test. May a champion win!



A View of the Golf Course

GOLFERS' LUNCHEON

will be held at the French Lick Springs Golf Club Monday, October 4th, at 12:15 p. m.

ENTRY BLANK

Dr. A. P. Hauss,
New Albany, Indiana.

Please add my name to the list of entrants in the annual golf tournament.

Name .....

Address .....

Club handicap .....

The Trap Shoot



Skeet Shooting at French Lick

One of the outstanding sporting events offered to the members of the Indiana State Medical Association during the annual meeting at French Lick Springs October 4th to 6th will be the trapshooting tournament.

The contest this year will be the fourth to be held. A great many doctors who have taken up this exciting sport for recreation are regular attendants at gun club shoots throughout the state. A large number of them have developed into real shooters and a contest between these enthusiasts is going to result in plenty of "red hot" scores.

French Lick Springs offers an ideal place to hold such a tournament. Phil Miller, a shooter with a national reputation, has charge of the traps at the Springs and he is cooperating with the committee of the State Association to make the meet a big success.

In planning the program, the beginners and the average shooters have not been overlooked. In order to encourage those less familiar with this sport, they will be classed so that the "old timers" will not have an advantage.

Suitable prizes will be awarded to the best scores in all classes as well as prizes to the high guns on the entire program.

The committee has arranged a program calling for 200 targets as follows:

One hundred sixteen-yard targets which will be shot off with the contestants divided into four classes. This plan puts the better shooters, the fair shooters, the weaker shooters, and the beginners in their respective classes.

Fifty target handicap event. The position of the shooter to be determined by his score made in the hundred target event and based on A. T. A. rules.

Twenty-five pairs of doubles open to all contestants on an equal basis.

Plan to be present and take part in this great contest. If you can hit a target at all, you may be one of the boys to take home the bacon.

ENTRY BLANK

Dr. Robert Smallwood,

Bedford, Indiana.

Please add my name to the list of Indiana medics who intend to "shoot 'em up" at the French Lick Springs Trap and Skeet Club.

Name .....

Address .....

The Trapshooting tournament will begin at 1:00 p. m., Monday, October 4th, at the French Lick Springs Trap and Skeet Club. Luncheon at 12:15 p. m. at the Trap and Skeet Club.



Trap and Skeet Club House

OFFICIAL PROGRAM

Annual Session

INDIANA STATE MEDICAL ASSOCIATION

FRENCH LICK SPRINGS HOTEL

October 4, 5, and 6, 1937

(Schedule will be carried out on Central Standard Time)

Sunday Evening, October 3, 1937, 8:00 p. m.
Executive Committee Meeting
French Lick Springs Hotel

MONDAY, OCTOBER 4, 1937

Morning

8:00 a. m. Registration, convention hall, French Lick Springs Hotel.

8:00 a. m. Opening of scientific exhibit, mezzanine floor, and commercial exhibits, convention hall, French Lick Springs Hotel.

9:00 a. m. Annual golf tournament. Eighteen holes, low gross and handicap medal play, Hill Course, French Lick Springs. Fee $1.00—special rate to the convention guests.

Noon

12:15 p. m. Golfers' luncheon, French Lick Springs Golf Club.
Trap shooters' luncheon, Skeet and Trap Club.

12:30 p. m. Council meeting, north dining room, French Lick Springs Hotel.

Afternoon

1:00 p. m. Annual trap shoot, French Lick Springs Skeet and Trap Club.

2:00 p. m. Moving picture, "The Birth of a Baby." Main convention hall.

4:00 p. m. Meeting of House of Delegates, convention hall, French Lick Springs Hotel.

Evening

6:30 p. m. Annual dinner meeting for women physicians, north dining room, French Lick Springs Hotel.
Edith Boyer Schuman, M.D., Bloomington.
Subject: "Sulfanilamide."

7:00 p. m. Buffet supper, smoker and stag party, French Lick Springs Hotel. Award of golf and trap shooting prizes.

TUESDAY, OCTOBER 5, 1937

Morning

8:00 a. m. Registration continues, convention hall, French Lick Springs Hotel.

8:00 a. m. Scientific exhibit, mezzanine floor, and commercial exhibits, convention hall, French Lick Springs Hotel.

GENERAL MEETING, MAIN CONVENTION HALL, FRENCH LICK SPRINGS HOTEL

9:30 a. m. Call to order by E. D. Clark, M.D., Indianapolis, president, Indiana State Medical Association.

Greetings and introduction of president of Orange County Medical Society, J. R. Dillinger, M.D., by George Dillinger, M.D., chairman of Committee on Arrangements.

9:40 a. m. Address of welcome by Thomas Taggart.

9:45 a. m. President's address, E. D. Clark, M.D., Indianapolis.

Scientific Program

10:00 a. m. **Sumner L. S. Koch, M.D.**, Associate Professor of Surgery, Northwestern University Medical School, Chicago.



Dr. Koch

Subject: "Infections of the Hand."

Abstract: *With every type of infection of the hand, the persistence of infection, the routes of extension, and the access of choice to the infected area depend upon the nature of the infecting organism and, still more definitely, on the anatomic formation of the part involved.*

Careful consideration of both factors results in saving of time and expense for the patient and, most important of all, in the preservation of function so essential for every individual whose livelihood and happiness depend upon his ability to use his hand.

10:30 p. m. **Frank J. Heck, M.D.**, Rochester, Minnesota.

Subject: "Interpretation of Routine Laboratory Findings for the General Practitioner."



Dr. Heck

Abstract: *Because of certain technical difficulties, fullest use has not been made by the practitioner in general of certain simple laboratory procedures. With improvement in technic and change in method, we now have methods for doing differential leukocyte counts which both from a diagnostic as well as prognostic standpoint give much more information. The significance of certain of these changes will be explained and the differential diagnosis given of various types of blood pictures with particular emphasis laid upon those determinations which can be carried out in any office.*

There will also be a discussion of the simplified sedimentation rate, its use from the diagnostic standpoint and its value as a prognostic determinant. The changes in the sedimentation rate in infections of various types, malignancy, and so forth, will be discussed.

11:00 a. m. **Jesse O. Arnold, M.D.**, Professor of Obstetrics, Temple University School of Medicine, Philadelphia.

Subject: "Fluid Balance and Dehydration in the Prevention and Control of Eclampsia."



Dr. Arnold

Abstract: *A rational treatment of eclampsia is presented, directed toward the control of certain fundamental physiological disturbances that occur within the brain.*

In recent years, research has revealed many of the factors concerned in intracranial pressure, cerebrospinal fluid disturbances, and brain edema.

Simple, easily applicable methods have been devised to control the effects of these factors, if not always the factors themselves.

Seven years of clinical experience in Temple University Hospital (and lately, in many other institutions) has conclusively demonstrated the correctness of the principles involved, and their dependability in practical application.

These methods have for their clinical basis the establishing and maintaining of a fluid-balance to prevent eclampsia, or the prompt correction by dehydration of that dangerous degree of water-retention that invariably accompanies the convulsive, or near-convulsive state.

Definite instructions are presented, with case-chart illustrations, for fluid-balance tests, weight-control, and the "ABC of Dehydration"—spinal drainage, intravenous glucose, and magnesium sulphate purging.

11:30 a. m. **Albert C. Furstenberg, M.D.**, Dean and Professor of Otolaryngology, University of Michigan Medical School, Ann Arbor, Michigan.

Subject: "Acute Infections of the Cervical Region and Mediastinum."



Dr. Furstenberg

(No abstract received.)

Noon (Tuesday, October 5)

12:15 p. m. Fraternity, class and ex-service men's luncheons and get-togethers.

Afternoon (Tuesday, October 5)

SECTION MEETINGS

MEDICAL SECTION

Chairman, E. M. VanBuskirk, Fort Wayne.
Vice-Chairman, George Dillinger, French Lick.
Secretary, B. G. Keeney, Shelbyville.

(Main Convention Hall)

2:00 p. m. **J. H. Warvel, M.D.**, Indianapolis.

Subject: "Protamine Insulin in the Treatment of Diabetes Mellitus."

Abstract: *Protamine insulin—most outstanding achievement in the treatment of diabetes since the discovery of insulin by Banting and Best in 1921.*

Report of original work by Hagedorn and associates in 1933-1935. Former attempts to retard insulin action. Rapid action of purified regular insulin of present day. Clinical indications for protamine insulin.

Comparative charts demonstrating the action of regular insulin, crystalline insulin and zinc protamine insulin. Report of clinical results with zinc protamine insulin in various diabetic complications.

Method of dosage determination. Points to be observed in using protamine insulin. Hypoglycemic reactions from over dosage are delayed, atypical and often recurrent—prevention and treatment of these reactions.

Zinc protamine insulin allows higher carbohydrate diet, more liberties in diet and better control of the diabetic state. Gain in carbohydrate tolerance following use of zinc protamine insulin.

Contra-indications for use of zinc protamine insulin.

Case reports on adolescents, adult and senile patients.

General summary of observations to date.

(Lantern slide demonstration.)

2:20 p. m. Discussion: Harvey L. Murdock, M.D., Fort Wayne.
Frank Green, Jr., M.D., Rushville.

2:30 p. m. **H. J. Pierce, M.D.**, Terre Haute.

Subject: "Common Neoplasms of the Skin."

Abstract: *Too frequently the ordinary skin neoplasms are abused by improper treatments, such as application of cauterizing chemicals and indiscriminate use of fulguration. The common benign and malignant skin tumors are briefly discussed with regard to proper therapeutic procedure. The value of radiation therapy in these conditions is emphasized. A few selected cases are to be demonstrated by lantern slides.*

2:50 p. m. Discussion: Donald C. McClelland, M.D., Lafayette.

3:00 p. m. **Emor L. Cartwright, M.D.**, Fort Wayne.

Subject: "Chronic Ulcerative Colitis."

Abstract: *The prevalence of chronic ulcerative colitis warrants an increasing interest in this disabling disease. It is not possible to make a diagnosis of colon disturbance by abdominal palpation nor by listening to the patient's description of bloody stools. The specific etiology of chronic ulcerative colitis need not concern us until scientists have reached a common accord on this question. However, we should be interested in ruling out amebiasis, other protozoal infestations, and malignancy.*

The therapy of this disease is about as varied as the theories concerning its cause. The work of Bargen has been of vast importance in producing a more optimistic outlook in the prognosis. His work has shown us the futility, as well as the danger, of all but emergency surgery in these cases.

3:20 p. m. Discussion: Robert W. Gehres, M.D., Shelbyville.
A. B. Graham, M.D., Indianapolis.

3:30 p. m. Election of section officers.

3:35 p. m. **Bernard D. Rosenak, M.D.**, Indianapolis.

Subject: "Inflammatory Diseases of the Small Intestine."

Abstract: *The functions and diseases of the small intestine have not been sufficiently studied. Sporadic reports of inflammatory granulomata of the small bowel dot the medical literature for many years. Not until 1932 was a sufficiently large group of such cases observed to make possible the de-*

termination of its clinical characteristics, diagnostic criteria and pathologic changes. At this time we recognize cicatrizing inflammations of the small intestine, characterized by ulceration, induration and stenosis of the segments of the small intestine with a tendency to the formation of internal fistulæ as a definite pathologic entity. Clinically, the disease occurs in young adults, produces fever, cramp-like abdominal pain, tenderness in the right lower quadrant and, frequently, diarrhea. The diagnosis can be established in most instances by careful x-ray examination, involving frequent observations of the progress of the barium meal through the loops of small intestine. Therapeutically, this disease has persistently resisted medical management and the procedure of choice is early excision of the diseased segments with anastomosis of healthy small intestine to healthy colon. This clinical concept lacks only a definite etiologic factor to make it acceptable as a new disease entity.

3:55 p. m. Discussion: William R. Tindall, M.D., Shelbyville.

4:05 p. m. **C. O. McCormick, M.D.**, Indianapolis.
Subject: "Fetal and Neonatal Loss."

Abstract: *During the recent years, the public and profession have been acutely interested in maternal mortality, and at present are much exercised in behalf of its reduction. An almost equally important and closely related mortality, that of fetal and neonatal loss, has and is attracting very little general attention. The importance of this latter mortality is best weighed by the fact that throughout this and other lands, the birth rate is approaching the death rate, in some instances to the alarming degree of near equality.*

With our present obstetric knowledge fully 50% of our unborn and newborn loss is preventable. Like the solution of maternal loss, the ultimate solving of fetal and young infant death calls for an equally intelligent and close cooperation of the lay public and profession.

In that syphilis plays so direct a role in fetal and infant loss and morbidity, and in that its complete eradication as a factor is now so nearly possible, the compulsory Wassermann upon every expectant mother should become generally adopted.

Also, granted that the reporting of all stillbirths as required by some states, and even all abortions as required by others, is quite helpful, the most fundamental aid will be derived when in advance of these disasters there will be functioning a requirement that all pregnancies be registered during their early weeks.

4:25 p. m. Discussion: Karl M. Beierlein, M.D., Fort Wayne.

4:35 p. m. **Darwin M. Short, M.D.**, Evansville.
Subject: "Diagnostic Methods in Tuberculosis for the Practitioner."

Abstract: *A comparison is made of the worth of the various diagnostic methods available to the physician as a means of case finding. These methods include the Mantoux test, physical examination, fluoroscopy and the x-ray in 6,000 collected cases, covering both the primary type infection and the reinfection or secondary type of tuberculosis. Special emphasis is made of the Mantoux test in the hands of the general practitioner—the keyman in the tuberculosis program.*

4:55 p. m. Discussion: M. H. Draper, M.D., Fort Wayne.

SURGICAL SECTION

Chairman, George Green, South Bend.
Vice-Chairman, Paul Beard, Indianapolis.
Secretary, Frank Ramsey, Indianapolis.

(North Convention Hall)

2:00 p. m. **Harold D. Caylor, M.D.**, Bluffton.
Subject: "Cecum Lignum."

Abstract: *The symptomatology, pathology, and diagnosis of this inflammatory hyperplasia of the cecum are considered in this study as well as the relationship of cecum lignum to appendicitis and the regression of the ligneous inflammation after appendectomy. Five cases are reported and their salient features analyzed and discussed.*

2:20 p. m. Discussion: W. H. McKnight, M.D., Bedford.

2:30 p. m. **Charles A. Weller, M.D.**, Indianapolis.
Subject: "Acute Perforated Peptic Ulcers and Their Relations to Trauma."

Abstract: *In this article a large number of acute perforated peptic ulcer cases have been studied and eighteen cases operated by the writer. The question, "Does trauma, produced by a severe blunt force, a fall, a compression of the abdomen, or strains produced by lifting or pulling, bear any relation as a causative factor in acute perforated peptic ulcers?" is discussed from various angles. Diagnosis as a rule is easy, but an error in diagnosis of acute perforated peptic ulcers quite often leads to a fatal outcome. The treatment of acute perforated peptic ulcer is a surgical operation and should be resorted to as soon as the diagnosis can be made, unless the patient is in too much shock. Trauma as a primary cause has not generally been accepted. As a secondary factor in acute perforations, much has been said, trauma has been given as one of the predisposing factors to perforation. Perforation of a peptic ulcer occurs as a rule without any external force but may also result from a contusion of the abdomen or by severe blunt force, from a concussion of the body in a fall from a height. Brief case histories are given to bear out the above statement.*

2:50 p. m. Discussion: E. E. Padgett, M.D., Indianapolis.

3:00 p. m. **Henry G. Weiss, M.D.**, Evansville.
Subject: "Treatment of Empyema."

Abstract: *Empyema is essentially an abscess and must be treated as such. Any collection of pus wherever found should be evacuated as early as it can be done satisfactorily and safely.*

Closed drainage of empyema can be done early with greater safety, less shock, and less tissue destruction than the open operation. Thoracotomy, with a small intercostal incision, closely fitting drainage tube, and completely sealed wound can be done safely in the most acutely ill.

Controlled negative pressure or suction through the drainage tube will provide gradual, controlled, evacuation of pus and adequate drainage in all acute cases. It will not permit pulmonary collapse and will gradually abolish a true pleural cavity. Suction is provided by a cheap, easily constructed hydraulic apparatus.

Since adopting this method we operate earlier, have no fatalities, have speedier convalescence, and in acute cases have no secondary operations.

3:20 p. m. Discussion: Frank Maurer, M.D., Indianapolis.

3:30 p. m. **Anson G. Hurley, M.D.**, Muncie.
Subject: "Endometriosis."

Abstract: *This paper comprises a study of 510 pelvic laparotomies not including cases of acute or chronic appendicitis done in females by my senior associate and myself between August 1, 1934, and August 1, 1937.*

Endometriosis is frequently encountered by the general surgeon as well as the gynecologist. Its incidence is greater than is generally believed. Since endometriosis is a progressive disease as long as there is ovarian activity, as early a diagnosis of the condition as is possible to be made is desirable in order to avoid extensive tissue destruction and to bring relief of symptoms.

3:50 p. m. Discussion: E. V. Wiseman, M.D., Greencastle.

4:00 p. m. **George J. Garceau, M.D.**, Indianapolis.
Subject: "Treatment of Colles Fracture."

Abstract: *An end result study of Colles' fracture is presented. A special analysis is made of the unsatisfactory results. Attention is called to factors which lead to unsatisfactory cosmetic and functional results. Treatment is stressed, with special attention to reduction and type of immobilization.*

4:20 p. m. Discussion: Stewart Crossland, M.D., Gary.

4:30 p. m. Election of section officers.

SECTION ON OPHTHALMOLOGY AND OTOLARYNGOLOGY

Chairman, Fred McK. Ruby, Union City.
Vice-Chairman, B. N. Lingeman, Crawfordsville.
Secretary, Eugene L. Bulson, Fort Wayne.

(Basement Convention Hall)

2:00 p. m. **D. A. Bartley, M.D.**, Indianapolis.
Subject: "Orbital Tumors."

Abstract: *a. Extra-ocular tumors: Including all tumors of the bony orbit outside the eyeball, and those of the orbital cavity when the eye has been removed.*

Report of a case of melanotic sarcoma of the orbit following enucleation. A brief outline of the method used in the removal of this tumor.

b. Intra-Ocular Tumors: A case report of a bilateral glioma, including the management and treatment of each eye.

2:20 p. m. Discussion: C. J. Adams, M.D., Kokomo.

Symposium: "The Middle Ear and Mastoid."

2:30 p. m. **C. R. Buikstra, M.D.**, Evansville.
Subject: "The Acute Middle Ear."

Abstract: *The fundamental differences between acute catarrhal and acute purulent otitis media are summarized briefly. Both, usually, are complications of a pre-existing nasal pharyngeal pathology, and in both an etiological factor not infrequently overlooked may be found in a sinusitis. Anatomical differences play an important role in the causation and complication of acute purulent otitis media in children as compared to that found in adults. Adenoidectomy is the treatment of choice in recurrent purulent otitis media of infants. The value of making cultures and smears at time of paracentesis is stressed. The treatment and complication of otitis media are discussed.*

2:45 p. m. **Keith T. Meyer, M.D.**, Evansville.
Subject: "The Roentgenology of the Mastoid."

Abstract: *The roentgenologist should be of great assistance to the surgeon in the diagnosis of mastoid disease. Proper teamwork between the roentgenologist and the surgeon is necessary because the clinical and physical findings should also be considered in the interpretations of the radiographic findings.*

The radiographs should reveal the following important diagnostic aid:

(1) The anatomical type of mastoid present (pneumatic, diploic);

(2) The presence and extent of the infection in the mastoid;

(3) The presence of emissary veins, cholesteatoma, etc.

3:00 p. m. **C. F. Leich, M.D.**, Evansville.
Subject: "The Indications for and the Mastoid Operation."

Abstract: *In acute otitis media, increase in symptoms suggests surgical mastoiditis before local symptoms themselves urise. Massive complications rarely appear before more obvious indications for intervention are evident. The operation is usually elective, evalution of clinical course, x-ray examinations and hemograms, will place operation in the most advantageous time, approximately the third week of acute otitis media. Too early or too late intervention invites complications. Symptoms and signs usually have logical sequence but may be altered by variations in type of infection, in bony structure, previous local infections, age, etc. The aim of operation is to eradicate infection and restore the function of the ear.*

Whiting's operation allows systematical exenteration of the cells, the internal guide being the lateral sinus, which determines the extent of the three major mastoid cell groups. Incomplete operation in the mastoid, in cells beyond its confines or too extensive manipulation about the antrum results in non-healing of the wound.

3:15 p. m. General discussion.

3:30 p. m. **Albert C. Furstenberg, M.D.**, Ann Arbor, Michigan.
Subject: "Meniere's Disease."

Abstract: *The syndrome Meniere's symptom complex embodies well defined clinical manifestations well known to every student of otology. A violent attack of vertigo in a patient with unilateral deafness; occasionally impaired cochlear function on both sides, but more profound in the ear to which the symptoms are referred; nausea, vomiting and spontaneous nystagmus in the severe seizures; persistent tinnitus—often unilateral—increased during the paroxysm; functional tests of little significance—usually within the limits of normal; a pathetic picture of total disability in an individual suffering from a vertigenous attack, or living in the terror of an impending one.*

The pathological changes responsible for the symptoms of this syndrome still remain a mystery. They are not chargeable to the internal ear nor can they be demonstrated anywhere along the auditory pathways except, perhaps, in a few instances where vascular changes about the nerves have been accidentally discovered. The clinical manifestations of Meniere's symptom complex cannot be definitely ascribed to any isolated part of the auditory tract. Rather it is more accurately assumed, perhaps, that any or all of its constituents may participate in the changes which give rise to a typical seizure.

The theory which gave rise to the treatment herein advocated was derived from the belief that Meniere's symptom complex was due to faulty water metabolism producing a hydration of the brain or the auditory mechanism. Water balance was therefore studied in a series of cases when it was discovered that hydration and dehydration had little to do with the disease but that it was influenced by the injection of sodium. The element, sodium, was then removed from the patient and in many instances the symptoms of the disease promptly disappeared. Our therapeutic indications resolve, therefore, into two recommendations: (1) to permit as small an intake of sodium as is possible, and (2) to prevent the accumulation of sodium by the body. The former is easily attained by means of diet and the latter by the administration of acid-producing salts such as ammonium chloride. When these two factors have been controlled, the intake of water does not need to be considered.

3:50 p. m. Discussion: J. K. Leasure, M.D., Indianapolis.

4:00 p. m. **C. W. Rutherford, M.D.**, Indianapolis.
Subject: "Retrobulbar Neuritis."

Abstract: *The term retrobulbar neuritis designates an inflammation of any part of the afferent visual and light pathways from the lamina cribrosa along the nerves, chiasm and tracts to the lateral geniculate bodies. The disease is classified broadly as acute and chronic; the latter will not be considered. The acute form occurs in association with many infective and inflammatory diseases and with some drugs that act as poisons to susceptible persons. The cardinal signs are (1) a visual field defect, usually a central scotoma of rapid onset, (2) an eyeground in which no pathology is evident in early stages, except that the disk is mildly edematous where the neuritis is located immediately posterior to the lamina cribrosa and (3) a marked tendency to spontaneous recovery. Controversial points of interest in the etiologic relationship of sinus disease to retrobulbar neuritis will be presented and discussed.*

4:20 p. m. Discussion: Martha B. Lyon, M.D., South Bend.

4:30 p. m. Election of section officers.

SECTION ON ANESTHESIA

Chairman, Richard B. Stout, Elkhart.
Vice-Chairman, Fred Thomas, Indianapolis.
Secretary, Lillian Mueller, Indianapolis.

(Parlor E, Mezzanine Floor)

2:00 p. m. **Roy A. Geider, M.D.**, Indianapolis.
Subject: "Ether Anesthesia."

Abstract: *The present-day trend is away from ether anesthesia. In view of the safety of ether, such an attitude is unjust and wrong.*

The usual objections to ether are as follows:

(1) Unpleasant induction.

(2) More frequent pulmonary complications.

(3) Postoperative nausea and vomiting and acidosis.

All of these objections can be eliminated by the proper preparation of the patient and better administration of the anesthetic.

The importance of pre-medication and choice of medicaments.

The explosibility of the various inflammable anesthetic agents place ether at the top of the list in safety from this viewpoint.

Relaxation is more satisfactory with ether than with any other single agent.

We have no single agent to entirely replace ether when we consider safety the paramount issue in anesthesia.

2:20 p. m. Discussion: Fred Thomas, M.D., Indianapolis.

2:30 p. m. **John S. Lundy, M.D.**, Minneapolis-Rochester, Minnesota.
Subject: "Sacral Anesthesia." Motion pictures.

Abstract: *A motion picture on the subject of sacral anesthesia. The film illustrates in slow motion on bony structures the technic employed in sacral block anesthesia, and is illustrated further with the use of the procedure twice clinically. There are two reels.*

2:50 p. m. Discussion: J. W. Ricketts, M.D., Indianapolis.

3:00 p. m. **Floyd T. Romberger, M.D.**, Lafayette.
Subject: "This Anesthetic Business."

Abstract: *Success in the practice of anesthesia depends upon a number of closely related factors: (1) A thorough knowledge and real proficiency in the administration of the reasonably well known, safe, and effective anesthetic agents. (2) Educational efforts both within and without the profession so that there will exist within any given community an appreciative demand for the highest type of professional services. (3) The ability of the medical anesthetist to correlate factors 1 and 2 and fit the most adaptable anesthetic agent to the surgical problem immediately at hand.*

Failure to establish medical anesthesia in any given community results most likely from: (a) apathy of the profession and the laity, (b) lack of knowledge, equipment, and experience on the part of the medical anesthetist, and (c) disinterest because of low professional standards and/or inability to earn a livelihood.

Believing that many anesthetists do not take the fullest advantage of the many agents and combinations reasonably and safely available, the entire field is summarized.

3:20 p. m. Discussion: C. E. Ragan, M.D., Terre Haute.

3:30 p. m. Round table discussion.

4:00 p. m. Election of section officers.

TUESDAY EVENING, OCTOBER 5, 1937

7:30 p. m. Annual banquet, main dining room, French Lick Springs Hotel.

Presiding officer, E. D. Clark, M.D., president, Indiana State Medical Association.

Presentation of certificate of merit to R. L. Sensenich, M.D., president 1936.



Dr. Abell

Irvin Abell, M.D., Louisville, Kentucky, president-elect of the American Medical Association.
Subject: (Title not received.)



Al Wynkoop

Al Wynkoop, Lebanon, Editor, The Lebanon Reporter.
Subject: "Ether That or Else."

WEDNESDAY, OCTOBER 6, 1937

7:00 a. m. House of Delegates breakfast meeting, French Lick Springs Hotel. Annual election of officers and selection of convention city for 1938.

Meeting of Council immediately following adjournment of the House of Delegates.

8:00 a. m. Registration continues, convention hall, French Lick Springs Hotel.

8:00 a. m. Scientific exhibit, mezzanine floor, and commercial exhibits, convention hall, French Lick Springs Hotel.

GENERAL MEETING, MAIN CONVENTION HALL, FRENCH LICK SPRINGS HOTEL

9:00 a. m. **Joseph Brennemann, M.D.**, Professor of Pediatrics, The School of Medicine of the Division of the Biological Sciences, University of Chicago, Chicago.



Dr. Brennemann

Subject: "Appendicitis in Childhood."

Abstract: *The reasons for apparent failure in reduction of mortality. Symptoms and diagnosis. Early, small lesion with little fever and pain. Diagnostic importance of point tenderness in early appendicitis as compared with pain, of involuntary rigidity, later, as evidence of peritonitis. Leukocytosis variable but significant. Vomiting. Spontaneous cure, rupture with spreading peritonitis, and walling off, with indications for treatment of each. Importance of peritonitis and of differentiation between appendiceal and so-called primary peritonitis. Pitfalls in diagnosis with especial reference to respiratory tract infections and retro-peritoneal lymphadenitis. Allergy. Postoperative complications, diagnostic value of rectal examination and the indication for, and the striking benefits from the use of the Levine tube of Wangenstein.*

9:30 a. m. **Louis Arthur Buie, M.D.**, Associate Professor of Proctology, University of Minnesota Graduate School of Medicine, Minneapolis-Rochester, Minnesota.



Dr. Buie

Subject: "Diseases of the Anus and Rectum."

Abstract: *This will include a discussion of the differential diagnosis of the more common diseases of the anus and rectum and a description of the treatment of hemorrhoids, fissures, pruritus ani, and anal fistulas.*

Doctor Buie will attempt to present these subjects in a manner which will be of practical advantage to the general practitioner but will also include points which will interest the internist and the surgeon.

10:00 a. m. **Karl A. Menninger, M.D.**, Topeka, Kansas.

Subject: "The Psychoneurotic and the General Practitioner."



Dr. Menninger

Abstract: *It is generally agreed that a large proportion of medical practice, both general and specialized, is made up of persons whose suffering is not dependent upon any structural pathology. These patients produce a variety of reactions in physicians—sometimes curiosity, sometimes irritation, sometimes exasperation, and sometimes over-solicitousness. A suspicion of malingering is difficult for many physicians to exclude from their conception of these cases, and a general attitude of involuntary martyrdom is usually observable in the patient.*

These cases will remain an enigma so long as a full understanding of the psychological factor in disease is lacking. Medicine has gone through three eras: (1) the chemical, (2) the physical, (3) the psychological. In each era diagnostic emphasis and therapeutic practice was based chiefly upon the prevailing concept of disease, and modern medicine retains elements of all three. Hyperthyroidism, for example, may be viewed from the chemical, physical, or psychological standpoint and treated differently according to which viewpoint is taken. In some conditions the psychological aspect is relatively unimportant, for example, carcinoma; in others, for example, the psychoneuroses, it is the most important.

Physicians and surgeons themselves sometimes become the victims of the patients with this affliction and are led to undertake therapeutic procedures which only make bad matters worse and are added by the patient to his list of griefs and grievances. This the physician can avoid by making a conscientious study of medical psychology and of the emotional factor in disease.

10:30 a. m. **Bernard Henry Nichols, M.D.**, Cleveland, Ohio.

Subject: "Roentgenology as an Aid to Diagnosis of Lesions in the Upper Right Abdomen."



Dr. Nichols

Abstract: *The close proximity of these organs often makes a clinical diagnosis extremely difficult. This difficulty is enhanced also by the increased neurological mechanism of these organs as illustrated by the definite clinical manifestations of lesions in the colon produced reflexly by a stone in the ureter or a lesion in the kidney.*

The necessity of a systematic examination will be stressed, showing that the lumbosacral region, spine and right urinary tract regions should be excluded first. The technic of the investigation of the gallbladder, the stomach and duodenum will be discussed and also the proper method of determining lesions of the colon and the aid that might be given by x-ray in the presence of a clinical pathologic change in the appendix.

The methods of technic and procedure in this subject will be illustrated by lantern slides in order to show the greatest conservation of time and expense to the patient.

11:00 a. m. **John S. Lundy, M.D.**, Professor of Anesthesia and Surgery, University of Minnesota Graduate School of Medicine, Minneapolis-Rochester, Minnesota.

Subject: "Anesthetic Agents and Methods Useful in General Practice."



Dr. Lundy

Abstract: *In general and office practice the choice of anesthetic agents is limited for several reasons, such as the desirability of portability in general practice, and in office practice of the patient's being able to return home within an hour or so after being anesthetized.*

The uses of ethyl ether and divinyl ether are discussed from the standpoint of safety and convenience and beneficial results, as are also the gaseous anesthetics, nitrous oxide, ethylene and cyclopropane. The use of avertin and colonic oil ether is likewise discussed briefly, and the technic of the application of evipal and pentothal sodium as intravenous anesthetics is presented. Local, regional and spinal anesthesia are also considered and their practical application in general practice is given. The whole paper is based on the possibility that a skilled professional anesthetist may not be available; if he were available, of course, the discussion would be entirely different.

11:30 a. m. **Frank H. Lahey, M.D.**, Boston, Massachusetts.

Subject: "Some of the Newer Developments in Thyroid Disease."



Dr. Lahey

Abstract: *The causes of deaths in hyperthyroidism in patients operated and unoperated is discussed. A majority of thyroid deaths could be avoided if it were recognized that sixty per cent of all thyroid deaths are due to delay in dealing with hyperthyroidism, to cardiac failure, the result of long-standing hyperthyroidism and to emboli, the result of auricular fibrillation so often associated with hyperthyroidism.*

The treatment of acute thyroid crises and their prevention will be discussed.

The two types of hyperthyroidism, activated and apathetic, will be described.

The relation of hyperthyroidism to heart disease and to pregnancy and their management will be discussed.

Examples of unusually deep intrathoracic goiters will be presented together with the effect upon the trachea.

The origin of carcinoma in thyroid disease will be discussed. The hopefulness of the three types and their sensitivity to radiation will be discussed.

The mechanism of bilateral abductor paralysis together with an operation which accomplishes relief for these patients will be presented.

The advantages of helium in patients with narrowing of the trachea in thyroid disease and our experiences with this gas over a period of two years will be presented.

The results of a three-year research in blood iodine studies in relation to thyroid disease will be presented.

SCIENTIFIC EXHIBIT

Clyde G. Culbertson, M.D., Director
A. S. Giordano, M.D.
H. M. Banks, M.D.

1. X-RAY EXHIBIT.
   Indiana Roentgen Society.
2. BRONCHOSCOPY.
   Drs. J. V. Cassady, Hugh A. Kuhn, Eugene L. Bulson.
3. INCIDENCE OF HUMAN PARASITES IN UNITED STATES.
   Dr. C. L. Williams in cooperation with Purdue University.
4. TREATMENT OF EARLY SYPHILIS.
   American Medical Association.
5. CUTANEOUS GRANULOMAS.
   American Medical Association.
6. THE USE OF A PECTIN-AGAR PREPARATION IN TREATMENT OF INFANTILE DIARRHEA.
   Drs. Matthew Winters and C. A. Tompkins.
7. STUDIES OF APPENDICITIS.
   Dr. H. M. Banks, Methodist Hospital.
8. PNEUMONIA CONTROL.
   Metropolitan Life Insurance Co.
9. EXHIBIT ON PHOTOGRAPHY OF LESIONS OF THE CERVIX UTERI.
   Dr. C. E. Galloway, Northwestern University.
10. INDIANA STATE BOARD OF HEALTH.

SCIENTIFIC EXHIBIT — MOVING PICTURE SCHEDULE

Mezzanine Floor, French Lick Springs Hotel

Monday, October 4, 1937

Room No.

9:00 a. m. 236—Hernioplasty and Lipectomy.
Davis and Geck, Inc.
237—Emergency Operations.
Petrolagar Laboratories, Inc.
238—"Contacts" and "Behind the Shadows" (tuberculosis films).
Indiana State Board of Health.

10:00 a. m. 236—Pneumococcus Typing.
Lederle Laboratories, Inc.
237—Administration of Oxygen by Oropharyngeal Catheter.
Mead Johnson and Company.
238—Complications of the Second Stage of Labor. Postpartum Hemorrhage.
Indiana State Board of Health.

11:00 a. m. 236—Hernioplasty and Lipectomy.
237—Emergency Operations.
238—Prevention and Treatment of Eclampsia.
Indiana State Board of Health.

12:00 Noon 236—Pneumococcus Typing.
237—Emergency Operations.
238—Physiology and Conduct of Normal Labor.
Indiana State Board of Health.

1:30 p. m. 236—Hernioplasty and Lipectomy.
237—Emergency Operations.
238—Darkfield Diagnosis of Primary Syphilis.
Indiana State Board of Health.

2:30 p. m. 236—Pneumococcus Typing.
237—Administration of Oxygen by Oropharyngeal Catheter.
238—Treatment of Asphyxia Neonatorum.
Indiana State Board of Health.

3:30 p. m. 236—Hernioplasty and Lipectomy.
237—Emergency Operations.
238—The Forceps Operation.
Indiana State Board of Health.

Tuesday, October 5, 1937

9:00 a. m. 236—Pneumococcus Typing.
237—Allergy (3 reels).
Mead Johnson and Company.
238—Science and Modern Medicine (Syphilis).
Indiana State Board of Health.

10:00 a. m. 236—Cholecystectomy and Choledochostomy.
Davis and Geck, Inc.
237—Colles Fractures.
Petrolagar Laboratories, Inc.
238—Venereal Diseases.
Indiana State Board of Health.

11:00 a. m. 236—Pneumococcus Typing.
237—Allergy, or Resuscitation of the New Born.
Mead Johnson and Company.
238—Gonorrhea in the Male.
Indiana State Board of Health.

12:00 Noon 236—Cholecystectomy and Choledochostomy.
237—Allergy, or Resuscitation of the New Born.
238—"Contacts" and "Behind the Shadows" (tuberculosis films).

1:30 p. m. 236—Pneumococcus Typing.
237—Allergy, or Mediolateral Episiotomy.
Mead Johnson and Company.
238—Modern Diagnosis and Treatment of Syphilis.
Indiana State Board of Health.

2:30 p. m. 236—Cholecystectomy and Choledochostomy.
237—Colles Fractures.
238—Complications of the Second Stage of Labor. Postpartum Hemorrhage.

3:30 p. m. 236—Pneumococcus Typing.
237—Allergy.
238—Prevention and Treatment of Eclampsia.

Wednesday, October 6, 1937

9:00 a. m. 236—Esophageal Diverticulum.
Davis and Geck, Inc.
237—Influence of Drugs on Gastro-Intestinal Motility.
Petrolagar Laboratories, Inc.
238—Darkfield Diagnosis of Primary Syphilis.

10:00 a. m. 236—Pneumococcus Typing.
237—Differential Diagnosis of Vomiting of the New Born.
Mead Johnson and Company.
238—Physiology and Conduct of Normal Labor.

11:00 a. m. 236—Esophageal Diverticulum.
237—Emergency Operations.
238—Treatment of Asphyxia Neonatorum.

12:00 Noon 236—Pneumococcus Typing.
237—Emergency Operations.
238—Gonorrhea in the Male.

PROGRAM FOR WOMEN'S ENTERTAINMENT AND WOMAN'S AUXILIARY TO THE INDIANA STATE MEDICAL ASSOCIATION

MONDAY, OCTOBER 4, 1937

9:00 a. m. Registration, convention hall, French Lick Springs Hotel.

9:00 a. m. Golf for those who choose. (Ladies wishing to play golf at any time during the convention will please make arrangements at golf house. There will be a special golf rate of one dollar per day in effect during the convention for both courses.)

2:00 p. m. Moving picture, "The Birth of a Baby." Main convention hall.

3:00 p. m. Reception and tea honoring officers of the Auxiliary to the Indiana State Medical Association, Japanese Garden, French Lick Springs Hotel. Orange County Auxiliary and Floyd County Auxiliary presiding.

5:00 p. m. Board meeting, Woman's Auxiliary to the Indiana State Medical Association, Parlor D, French Lick Springs Hotel.

6:30 p. m. Dinner party and entertainment, West dining room, French Lick Springs Hotel. "An Evening in Old Mexico," with Bertita Harding, eminent author, as guest speaker.

10:30 p. m. Informal dance in hotel lobby. Cards and general get-together, mezzanine floor.

TUESDAY, OCTOBER 5, 1937

8:30 a. m. Auxiliary Breakfast, west dining room, French Lick Springs Hotel. Mrs. Marcus Ravdin, president, presiding.

Program

Invocation—Mrs. R. L. Holaday, Paoli.

Address of Welcome—Mrs. R. E. Baker, Orleans.

Response—Mrs. Henry S. Leonard, Indianapolis.



Dr. Teschner

Guest speaker: Paul A. Teschner, M.D., Assistant Director, Bureau of Health and Public Instruction, American Medical Association.

Subject: "The Doctor's Wife."

Report of National Meeting at Atlantic City—Mrs. George R. Dillinger, French Lick.

10:00 a. m. General business session, Woman's Auxiliary to the Indiana Medical Association, North convention hall, Mrs. Marcus Ravdin presiding.

Call to order.

Reading of the minutes by the Secretary, Mrs. Alfred Ellison, South Bend.

Report of Treasurer, Mrs. Clarence L. Bock, Muncie.

Report of Corresponding Secretary, Mrs. Herman Baker, Evansville.

Report of State Chairmen:

Councilor, Mrs. R. L. Compton, Richmond.

Parliamentarian, Mrs. W. R. Davidson, Evansville.

Historian, Mrs. John T. Wheeler, Indianapolis.

Organization, Mrs. George R. Dillinger, French Lick.

Legislation, Mrs. I. N. Trent, Muncie.

Press and Publicity, Mrs. E. E. Padgett, Indianapolis.

Public Relations, Mrs. J. Crede Miller, Frankton.

Hygeia, Mrs. A. C. Rettig, Muncie.

Program, Mrs. John J. Connelly, Terre Haute.

Exhibits, Mrs. Carl Schoen, New Albany.

Pioneer Memorials, Mrs. O. G. Pfaff, Indianapolis.

Reports of county auxiliary presidents.

Election of officers.

Post convention Board meeting.

1:00 p. m. Luncheon and bridge party, French Lick Springs Golf Club. Ladies assemble at main entrance of hotel for cars to the golf club.

7:30 p. m. Annual Banquet, main dining room, French Lick Springs Hotel. Principal speakers:

Irvin Abell, M.D., Louisville, Kentucky, president-elect of the American Medical Association.

Al Wynkoop, Lebanon, Editor The Lebanon *Reporter.*

Dancing in main lobby of hotel until midnight.

WEDNESDAY, OCTOBER 6, 1937

7:00 a. m. Before-breakfast walk through gardens to French Lick Springs Dairy. Start from hotel lobby.

8:30 a. m. Breakfast, main dining room.

9:30 a. m. Inspection of the Pluto bottling plant at French Lick Springs Hotel. Ladies assemble on hotel porch.

COMMITTEES FOR THE EIGHTY-EIGHTH ANNUAL SESSION OF THE INDIANA STATE MEDICAL ASSOCIATION, FRENCH LICK, 1937

Finance—Mart Hassenmiller, Chairman; Robert Harris, W. C. Sherwood, H. H. Reeder.

Lantern— W. E. Schoolfield, Chairman; A. E. Newland, P. R. Pierson.

Hotel—H. L. Miller, Chairman; R. L. Holaday, O. H. Stewart.

Banquet—R. E. Baker, Chairman; F. D. Martin, C. E. Briscoe, W. D. Bretz, J. I. Mitchell.

Publicity — Ivan Clark, Chairman; W. F. Edwards, Charles Emery.

Registration—C. E. Boyd, Chairman; H. L. Miller, J. R. Dillinger.

Golf—A. P. Hauss, Chairman; H. B. Shacklett, W. A. Hall, James Baxter, Jr., Addis Robertson.

Trap Shoot—Robert Smallwood, Chairman; John I. Maris, J. R. Dillinger.

Entertainment — H. R. Wilber, Chairman; Carl Schoen, L. H. Allen, Donald Colglazier, Marvin McClain.

Military Service—John I. Maris, Chairman; C. D. Fulkerson, H. L. Miller.

Women's Entertainment — Mrs. George Dillinger, Chairman; Mrs. C. E. Boyd, Mrs. H. L. Miller, Mrs. R. E. Baker, Mrs. J. R. Dillinger, Mrs. Ivan Clark, Mrs. R. L. Holaday, Mrs. J. I. Maris, Mrs. S. F. Teaford, Mrs. G. G. Colglazier, Mrs. C. D. Fulkerson.

Women Physicians—Irene Polhemus.

Reception—Austin Funk, Chairman; H. C. Ragsdale, W. H. Garner, J. R. Dillinger, H. C. Knapp, Robert Harris, C. B. Paynter, W. H. McKnight, R. E. Wynne, Marvin McClain, W. E. Amy, John H. Baldwin, W. S. Workman.

Automobile—G. G. Colglazier, Chairman; S. F. Teaford, W. H. Patton.

Fraternity—L. H. Allen, Chairman; F. M. Applegate, Marvin McClain.

Convention Hall — C. D. Fulkerson, Chairman; H. L. Miller, C. E. Boyd.

OFFICIAL CALL TO THE HOUSE OF DELEGATES

The next annual session of the Indiana State Medical Association will be held at French Lick, October 4, 5, and 6, 1937.

The House of Delegates will be constituted as follows: Marion County, eleven delegates; Lake County, four delegates; Allen County, three delegates; St. Joseph County, three delegates, Tippecanoe County, two delegates; Vanderburgh County, two delegates; Vigo County, two delegates; the other seventy-six county societies, each one delegate; thirteen councilors; the ex-presidents, namely: C. S. Bond, W. N. Wishard, J. B. Berteling, Joseph R. Eastman, W. H. Stemm, C. H. McCully, W. R. Davidson, E. M. Shanklin, Charles N. Combs, Frank W. Cregor, George R. Daniels, Charles E. Gillespie, Angus C. McDonald, A. B. Graham, F. S. Crockett, J. H. Weinstein, E. E. Padgett, and R. L. Sensenich. In addition to these, the president, secretary, and treasurer, all without power to vote except in case of a tie, when the president shall cast the deciding vote.

Blank credentials have been sent by the secretary to each county society, and the properly executed credentials should be mailed to Thomas A. Hendricks, 1021 Hume Mansur Building, Indianapolis, or brought to the session. No delegates will be seated unless wearing the official badge.

The House of Delegates will convene promptly at 4:00 p. m., Monday, October 4, in the main convention hall, French Lick Springs Hotel, and again at 7:00 a. m., Wednesday morning, October 6, in the main dining room, French Lick Springs Hotel, (breakfast meeting).

The order of business will be as follows:

1. Call to order by the president.
2. Roll call and seating of qualified delegates.
3. Reading of the minutes of previous meetings.
4. Appointment of reference committees.
5. Report of executive secretary.
6. Report of the treasurer.
7. Report of the chairman of the council.
8. Reports of standing and special committees:
   - (1) Credentials.
   - (2) Executive.
   - (3) Arrangements.
   - (4) Scientific Work.
   - (5) Public Policy and Legislation.
   - (6) Bureau of Publicity.
   - (7) Civic and Industrial Relations.
   - (8) Medical Education and Hospitals.
   - (9) Public Relations.
   - (10) JOURNAL Publication.
   - (11) Necrology.
   - (12) Graduate Education.
   - (13) Study of Health Insurance.
   - (14) Veterans' Affairs.
   - (15) Study of High School Athletics.
   - (16) State Fair.
   - (17) Mental Health.

(18) Prevention of Traffice Accidents.
(19) State Division of Public Health Liaison Committee to Deal with Social Security Act.
(20) Old Age Dependency.
(21) Secretaries' Conference.
(22) Syphilis Control.
(23) Auditing.
(24) Historian.

9. Reading of communications.
10. Reading of memorials and resolutions.
11. Unfinished business.
12. New business.
13. Adjournment.

The election of officers will be the first order of business at the second meeting of the House of Delegates. In addition to the regular officers, the terms of the following officers expire December 31, 1937, and their successors must be elected at the session: Delegates to the American Medical Association to succeed Don F. Cameron, Fort Wayne, and F. S. Crockett, Lafayette, and alternates, George Dillinger, French Lick, and A. M. Mitchell, Terre Haute.

Delegates from the third, sixth, ninth, and twelfth districts are reminded that the terms of their councilors will expire December 31, 1937, and new councilors should be elected to succeed the following:

Third District: H. C. Ragsdale, Bedford.
Sixth District: Samuel Kennedy, Shelbyville.
Ninth District: F. T. Romberger, Lafayette.
Twelfth District: E. M. VanBuskirk, Ft. Wayne.

Some of these elections already may have been held but they should be reported to the House of Delegates at this session for confirmation.

THOMAS A. HENDRICKS,
Executive Secretary.

REPORT OF COMMITTEE ON CREDENTIALS

House of Delegates,
Indiana State Medical Association
Gentlemen:

In accordance with the Constitution and By-Laws of the Indiana State Medical Association, each county medical society must certify its delegates and alternates previous to the annual session of the State Association. Your committee urges that every society in the state properly certify its delegates. A postal card notification signed by the secretary of the local county medical society and sent to the headquarters office is sufficient certification. If you have not yet taken this action in your society, we urge that this be done immediately and that the headquarters office or this committee be notified.

Respectfully submitted,
W. F. CARVER, M.D., *Chairman,*
J. W. BOWERS, M.D.,
W. E. AMY, M.D.

REPORT OF THE EXECUTIVE SECRETARY

House of Delegates,
Indiana State Medical Association
Gentlemen:

On to 3,000!

That is the membership goal which we hope to reach by December 31, 1937. We stand as of August 1, 1937, when this report was made, with 2,918 paid-up members which means there are 82 yet to get, with five months to go. This is not insurmountable for if every practicing physician who is eligible to membership joined his local county medical society within the next five months, the 3,000 mark would be reached easily and surpassed.

On the other hand it is not as simple as it sounds for the total number of physicians in Indiana has been decreasing steadily for the past decade and longer. According to the figures contained in the American Medical Association directories since 1931, the percentage of Association members to the total number of physicians listed in Indiana shows a decided increase.

Year	Total Number of doctors	Members	Percent
1931	4,073	2,767	67.9%
1934	4,049	2,741	67.6%
1936	4,025	2,840	70.5%
1937	4,025	2,918	72.4%

It is interesting to note that the total number of doctors in the state is decreasing while the number of members is increasing. This total of 4,025 doctors listed for Indiana takes in all those who hold an M. D. license to practice in this state. This includes all types of doctors,— good, bad, and indifferent, men who practice part time, even those who advertise.

No concerted drive for members has ever been made by the State Association. Each year the headquarters office sends a list of doctors as they are recorded in the latest American Medical Association directory (directories are published once every two years) and in the membership files of the Association to the county medical societies covering the doctors in each county. Secretaries are asked to check the lists and report the names of all ethical practicing physicians in their counties who are not members of the Indiana State Medical Association. Taking these returns as a basis there are 600 doctors in the state who are eligible to membership in the State Association who are not members. This year 72 counties out of 82 societies were heard from.

The latest American Medical Association directory gives the names of 4,025 physicians in Indiana, of which 2,918 are members of the State Association, leaving 1,107 physicians who are not members. It is evident that the field from which to draw additional prospective members is cut considerably.

It is not merely for the sake of saying that there are 3,000 doctors in the Association that we

are placing that figure as a goal. It is because of the ever-increasing necessity of having every possible member on the rolls of the organization, as only through this method can the profession of the state obtain that unity of effort which must be had in order to battle for the maintenance of a high standard of medical service for the Indiana public.

The Past Year

Just about everything has happened during the past year that can happen to a profession in peace time. Social legislation, both national and local, placing greater duties and responsibilities on the medical profession, was enacted. A tenacious legislative struggle on the part of the cultists to lower medical standards took place in the General Assembly. Stories of the immediate coming of socialized medicine rose to a new high, subsided, and then burst forth on front pages over all the land during the American Medical Association meeting at Atlantic City, only to flatten out again in summer doldrums. Ten thousand social service workers invaded Indianapolis for the week of their national conference in May and devoted much time to approving and propagandizing for sickness insurance and socialized medicine.

And during the year southern Indiana bore the brunt of the "greatest peacetime disaster this country has ever known," the Ohio valley flood. The profession of southern Indiana received nationwide recognition over the radio, from the pen of such noted columnists as Westbrook Pegler, and in such publications as the *New York State Journal of Medicine*, for the courage and heroism displayed during this crisis. Indeed it may be said that a new peacetime record for medical science and service was established in southern Indiana when the flood came and the waters receded and not a single case of typhoid fever developed.

The Year to Come

Detailed discussion of the problems, the important events of the past year, the solutions suggested, and the policies adopted may be ascertained by reading the following reports of the officers and the standing committees of the State Association. Every one of these reports contains much important information and in order for a physician to have an understanding of the situation in general and the meaning of present happenings to each individual, these reports should be read and studied. Individuals or societies having suggestions should forward these for consideration of the House of Delegates or the proper committees, until the House meets.

The profession of Indiana, despite all it has gone through the past year, may look forward to the coming twelve months with confidence in the fact that it is better equipped materially, financially, and scientifically to serve the public of Indiana than it was perhaps a few years ago.

Respectfully submitted,

THOMAS A. HENDRICKS,
Executive Secretary.

REPORT OF THE TREASURER

House of Delegates,
Indiana State Medical Association

Gentlemen:

The Indiana State Medical Association continues to enjoy a sound financial status. The report of the certified public accountants, George S. Olive and Company, which follows, gives you a detailed account of all funds and holdings of the Association as of December 31, 1936. Only one major addition is to be made to this report at this time. Upon the maturity of the $2,000 worth of Lake County Highway Aid bonds in January, 1937, this amount, together with $3,000 additional, drawn from our general fund, was invested in United States Treasury certificates. This increases the general fund investments by $3,000 over the total investments reported at December 31, 1936.

Accountant's Report

January 7, 1937.

The Council,
Indiana State Medical Association,
Indianapolis, Indiana.

Gentlemen:

We have examined the cash records of your Association for the year ended December 31, 1936. This examination was undertaken for the purpose of determining and verifying the cash transactions for the year.

The results of our examinations are presented in this report, which includes (1) text of comments; (2) statement of assets of all funds at December 31, 1936; (3) statements of receipts and disbursements of all funds for the year ended December 31, 1936.

General Comments

In exhibit A is presented an analysis of the increase in assets of the Association for the year ended December 31, 1936, showing in summary form the sources from which this increase was derived.

Details of the assets of all funds are presented in exhibit B.

Details of the receipts and disbursements of cash in the general fund, THE JOURNAL of the Indiana State Medical Association, and the medical defense fund are presented in exhibits C, D, and E.

Yours very truly,

GEORGE S. OLIVE & CO.,
Certified Public Accountants.

INDIANA STATE MEDICAL ASSOCIATION

List of Statements Contained in Report on Examination of Cash Records, Year Ended December 31, 1936

Exhibit A—Analysis of increase in assets, all funds, year ended December 31, 1936.

Exhibit B—Statement of assets, all funds, at December 31, 1936.

Exhibit C—Comparative statement of cash receipts and disbursements of the general fund, years ended December 31, 1936, and December 31, 1935.

Exhibit D—Statement of cash receipts and disbursements of THE JOURNAL of the Indiana State Medical Association, year ended December 1936.

Exhibit E—Statement of cash receipts and disbursements of the medical defense fund, year ended December 31, 1936.

Exhibit A

Analysis of Increase in Assets, All Funds, Year Ended December 31, 1936

TOTAL ASSETS, DECEMBER 31, 1936 —exhibit B		$42,692.91
TOTAL ASSETS, DECEMBER 31, 1935		39,457.84
NET INCREASE		$ 3,235.07
Arising from the following sources:		
Excess of cash receipts over disbursements — general fund, year ended December 31, 1936—exhibit C	$ 2,560.25	
Excess of cash receipts over disbursements — JOURNAL of the Indiana State Medical Association, year ended December 31, 1936	154.82	
Excess of cash receipts over disbursements — medical defense fund, year ended December 31, 1936	540.00	
	$ 3,255.07	
Less: Reduction of investment (Rokeby Apartment Hotel, Chicago)	20.00	
Total net increase		$ 3,235.07

Exhibit B

Statement of Assets, All Funds, at December 31, 1936

GENERAL FUND:		
Cash on deposit—exhibit C	$ 5,088.79	
Petty cash fund	200.00	
Investments:		
Ft. Wayne, Indiana, School Improvement bonds	3,000.00	
Lake County, Indiana, State Highway Aid bonds	2,000.00	
Marion County, Indiana, Flood Prevention bonds	3,000.00	
Indianapolis City Hospital bonds	5,000.00	
United States Treasury bonds	5,000.00	
Beachton Court Apartments, Chicago —bonds evidenced by certificates of deposit	4,000.00	
Rokeby Apartment Hotel, Chicago—bond evidenced by certificate of deposit	980.00	
Total general fund assets		$28,268.79
JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION:		
Cash on deposit—exhibit D		$ 2,591.16
MEDICAL DEFENSE FUND:		
Cash on deposit—exhibit E	$ 1,832.96	
Investments:		
Ft. Wayne, Indiana, School Improvement bonds	2,000.00	
Marion County, Indiana, Flood Prevention bonds	2,000.00	
Indianapolis City Hospital bond	1,000.00	
United States Treasury bonds	5,000.00	
Total medical defense fund assets		11,832.96
TOTAL ASSETS — ALL FUNDS — exhibit A		$42,692.91

Exhibit C

Comparative Statement of Cash Receipts and Disbursements, Years Ended December 31, 1936, and December 31, 1935

GENERAL FUND

	Year Ended		
	Dec. 31, 1936	*Dec. 31, 1935*	*Increase —Decrease*
Balance, Beginning of Year	$ 2,528.54	$ 5,313.13	—$2,784.59
Receipts:			
Membership dues	19,733.00	$19,470.00	$ 263.00
Income from exhibits	3,467.50	1,950.00	1,517.50
Postgraduate study	———	74.84	—74.84
Rokeby Liquidation Trust Distribution	20.00	———	20.00
Interest income:			
United States Government bonds	311.25	317.65	—6.40
Indianapolis, Indiana, City Hospital bonds	247.50	247.50	———
Marion County, Indiana, Flood Prevention bonds	212.50	212.50	———
Ft. Wayne, Indiana, School Improvement bonds	225.00	225.00	———
Lake County, Indiana, State Highway Aid bonds	100.00	100.00	———
Total receipts	$24,316.75	$22,597.49	$1,719.26
Beginning Balance Plus Cash Receipts	$26,845.29	$27,910.62	—$1,065.33
Disbursements:			
Transfers of applicable portion of dues to:			
THE JOURNAL of the Indiana State Medical Association—exhibit D	$ 5,678.00	$ 5,602.00	$ 76.00
Medical defense fund—exhibit E	2,108.25	2,081.25	27.00
Headquarters office expense	8,670.27	8,535.06	135.21
Publicity committee	337.85	260.70	77.15
Public policy	541.23	429.15	112.08
Council	122.91	110.85	12.06
Officers	603.29	491.17	112.12
Annual session	2,678.39	1,805.01	873.38
Miscellaneous committees	634.54	787.99	—153.45
Postgraduate study	381.77	6.90	374.87
Premium and accrued interest on purchase of United States Treasury bonds	———	272.00	—272.00
Total disbursements	$21,756.50	$20,382.08	$1,374.42
	$ 5,088.79	$ 7,528.54	—$2,439.75
Deduct: Disbursement for United States Treasury bonds	———	5,000.00	—5,000.00
CASH BALANCE, END OF YEAR	$ 5,088.79	$ 2,528.54	$ 2,560.25
	(Exhibit B)		(Exhibit A)

Exhibit D

Statement of Cash Receipts and Disbursements, Year Ended December 31, 1936

JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

BALANCE, January 1, 1936		$ 2,436.34
RECEIPTS:		
Subscriptions—members—exhibit C	$ 5,678.00	
Subscriptions—non-members	93.50	
Advertising	9,730.92	
Collections on accounts receivable	333.50	
Single copy sales	20.86	
Electrotypes	111.18	
Total receipts		15,967.96
		$18,404.30

DISBURSEMENTS:		
Editorial and management salaries	$ 6,377.50	
Printing	6,451.30	
Postage	550.54	
Electrotypes	538.33	
Office rent and light	732.09	
Office supplies	436.19	
Press clippings	97.94	
Extras—help and printing	428.28	
Convention reporter	170.65	
Miscellaneous	30.32	
Total disbursements		15,813.14
BALANCE, DECEMBER 31, 1936 — exhibit B		$ 2,591.16

Exhibit E

Statement of Cash Receipts and Disbursements, Year Ended December 31, 1936

MEDICAL DEFENSE FUND

BALANCE, JANUARY 1, 1936		$ 1,292.96
RECEIPTS:		
Transfer of applicable portion of dues from general fund—exhibit C		2,108.25
		$ 3,401.21
DISBURSEMENTS:		
Attorney's retainer fee	$ 600.00	
Malpractice fees	953.25	
Treasurer's bond	15.00	
		1,568.25
BALANCE, DECEMBER 31, 1936 — exhibit B		$ 1,832.96

Respectfully submitted,
A. F. WEYERBACHER, M.D.,
Treasurer.

REPORT OF THE CHAIRMAN OF THE COUNCIL

House of Delegates,
Indiana State Medical Association

Gentlemen:

Detailed reports of the three regular meetings which the Council of the Indiana State Medical Association holds each year have been published in the November 1936 and the February 1937 issues of THE JOURNAL. Hence only a brief summary of the actions taken by this body during the past twelve months is herewith submitted to the House of Delegates.

First Meeting, South Bend, October 6, 1936

The Council convened at the Oliver Hotel at 2:00 p. m., with Dr. O. O. Alexander, chairman, presiding. Roll call showed ten councilors, the president, members of the Executive Committee, and the executive secretary present.

Greetings from District Councilor

Dr. W. B. Christophel of Mishawaka, councilor of the thirteenth district, expressed the pleasure of the district in having the annual session held in South Bend.

Councilor District Meetings to Be Held Annually

Upon a motion made by Dr. N. K. Forster, the Council went on record to the effect that it should be the duty of each councilor to see that at least one district meeting is held each year in his district, for the purpose of at least maintaining an organization.

Discussion of Revision of Medical Law

Letter from Dr. William R. Davidson, secretary of the Indiana State Board of Medical Registration and Examination, read to the Council. In this letter Dr. Davidson stated that he did not feel that this was the proper time to revise the present medical practice act although in his mind some drastic changes are necessary in order to make the law more nearly perfect.

Letters from Political Candidates

Letters from the candidates for governor and lieutenant governor of both parties indicating that they were favorable to the medical profession read to the Council.

Journal Elections

Dr. E. M. Shanklin was unanimously re-elected editor of THE JOURNAL and Dr. Thurman B. Rice was elected to succeed himself as a member of the editorial board to serve five years, starting January 1, 1937.

Second Meeting, South Bend, October 8, 1936

The second meeting of the Council convened directly following the meeting of the House of Delegates at the Oliver Hotel with Dr. O. O. Alexander, chairman, presiding. Roll call showed ten councilors, the president, president-elect, the newly-elected president-elect, the treasurer, and the executive secretary present.

The report of the Auditing Committee which had been referred to the Council was approved.

Midwinter Meeting, Indianapolis, January 17, 1937

With twelve of the thirteen members of the Council, the president for 1936, the president for 1937, the president-elect, the treasurer, the editor of THE JOURNAL, and the executive secretary of the Indiana State Medical Association present, the Council convened in the morning at the Columbia Club with Dr. O. O. Alexander, chairman, presiding.

House of Delegates Attendance

Dr. Alexander called attention to the poor representation of some county societies at the annual meeting of the House of Delegates and suggested that each councilor make it his responsibility to contact each county society in his district previous to the state meeting, find out who has been elected delegate, and then get in touch personally with each delegate by telephone. If the delegates are not able to attend the meeting, then the councilor is to get in touch with each alternate so that each county in the state is represented in the House of Delegates.

Dr. Shanklin spoke of the fact that in many counties the selection of delegates was haphazard.

Dr. Wadsworth said that in his district the

presidents and the secretaries of the various county medical societies had a meeting previous to the annual meeting, which was well attended, in order to talk over local conditions and desires in relation to the state society.

Dr. Romberger said, "Fundamentally and basically the quality of the meeting you hold at your annual session is going to depend entirely upon the esprit de corps of the members that make up your House of Delegates."

Dr. Alexander spoke of the fact that the Council was in reality the key body of the State Association and that as such the councilors should be personally familiar with all activities of the State Association and with the reports of all of the committees.

Reports of Councilors and Officers

Each councilor made a report giving information in regard to the activities in his district and the problems arising in his society. These reports showed that the general condition of the profession throughout the state is satisfactory.

The reports of officers were received. Dr. R. L. Sensenich, retiring president, thanked the Council for the support he had received during his administration and advocated more effective organization for graduate study and also improved diagnostic laboratory facilities for rural areas.

Dr. E. D. Clark, president, spoke upon the committees which he had appointed for the coming year and stressed the fact that the Committee on Graduate Education had a most important duty to perform.

Dr. A. F. Weyerbacher, treasurer, reported that the Association had operated with a net increase at the end of the year of $3,235.07 above the balance at the end of the previous year.

Dr. E. M. Shanklin, editor of THE JOURNAL, spoke of the additional features in THE JOURNAL.

Journal Reprints

Dr. Romberger made the following motion: "I move that the Council instruct the editorial board and the publisher, in approving requests for reprints in volume, that each case shall be judged upon its merit as to whether or not the reprint is to be used for scientific purposes, for the dissemination of knowledge to the practitioners of medicine; the reprint shall be devoid of advertising of any and whatsoever character, and proper credit shall be given to the author, all this with the consent of the author." This motion was seconded, and carried.

Organization of Starke County

Dr. Christophel reported that the Starke County Medical Society had been reorganized and five physicians out of the seven in Starke county were members in good standing.

Plans for 1937 Annual Session

Preliminary report along with proposals and suggestions for the 1937 annual session to be held at the French Lick Springs Hotel on October 4, 5 and 6 was presented to the Council by Dr. George Dillinger, chairman of general arrangements.

The Council approved starting the session on Monday instead of Tuesday in order that those who desire might spend the week-end previous to the meeting at French Lick.

A motion made by Dr. Romberger was seconded and carried that the general scientific meetings be confined to out-of-state speakers and the section programs be made up of Indiana men.

Upon the motion of Dr. C. J. Clark, the Council went on record favoring the continuation of the scientific exhibit.

Dr. Christophel moved that the employment of professional medical stenographers be continued. Motion seconded, and carried.

Reports of Committee Chairmen and guests

The following were invited to attend the luncheon meeting and made brief reports to the Council: Dr. C. A. Nafe, chairman, Executive Committee; Dr. H. H. Wheeler, member of Executive Committee; Dr. Verne K. Harvey, director State Division of Public Health; Dr. W. D. Gatch, dean, Indiana University School of Medicine at Indianapolis; Albert Stump, attorney for the State Association; Dr. Homer G. Hamer, delegate to the American Medical Association, Dr. Norman M. Beatty, chairman, Legislative Committee, and Dr. A. M. Mitchell, chairman, Secretaries' Conference Committee.

Journal Business

The Council renewed the contract with Dr. E. M. Shanklin as editor of THE JOURNAL.

Advertising Chiropractors

Upon the motion of Dr. Christophel, seconded by Dr. Romberger, the Council referred to the Legislative Committee of the State Association a resolution introduced by Dr. Forster concerning advertising cultists employing physical therapy measures for the treatment of disease.

Selection of Orthopedic Surgeons

Motion was made by Dr. C. J. Clark, seconded by Dr. Forster, and carried, that each councilor request recommendations from the county medical societies within his councilor district for orthopedic men to conduct the work under the Crippled Children's Bureau of the State Department of Public Welfare.

Meeting Place

A motion made by Dr. J. C. Clark, and amended by Dr. Romberger, that the Antlers Hotel, the home of the Indianapolis Medical Society, be given first choice as a place to hold future meetings of the Executive Committee, the Council, or any other committees, was seconded and carried.

Elections for 1937

Dr. C. A. Nafe and Dr. C. H. McCaskey were elected members of the Executive Committee.

Dr. M. A. Austin, of Anderson, was elected chairman of the Council.

Respectfully submitted,

M. A. AUSTIN, M.D., *Chairman.*

First Councilor District

The meeting of the First District Medical Association was held June 17, 1937 at the Evansville Country Club at which time an interesting symposium on syphilis was heard. The attendance was quite satisfactory. During the business session Dr. O. T. Brazelton of Princeton was elected president; Dr. Minor Miller, of Evansville, vice-president; and Dr. Henry Faul of Evansville, secretary-treasurer.

I. C. Barclay, M.D., *Councilor.*

Second Councilor District

The county societies of the Second District are in a healthy condition.

Numerous young men have entered the profession throughout the district. Without exception, as far as I have been able to learn, these men are actively interested in organized medicine.

The county societies maintain acute interest in all advances made in the medical and surgical field. They have leaders in the various phases of advance and research to address and instruct them.

The district meeting will be held this fall in Greene County. The date of the meeting will be at the pleasure of the county society.

H. C. Wadsworth, M.D., *Councilor.*

Third Councilor District

County societies of the Third District are all in good condition and nothing has occurred during the past year which calls for any special comment.

H. C. Ragsdale, M.D., *Councilor*

Fourth Councilor District

The annual meeting of the Fourth District Medical Society met at the Jennings County library building, North Vernon, Indiana, May 26th. Officers elected for the ensuing year were:

Dr. E. C. Cotton, Madison, president.

Dr. A. M. Kirkpatrick, Columbus, vice-president.

Dr. O. A. Turner, Madison, secretary-treasurer.

All doctors of this district affected by the flood have conditions in working order at the present time.

Maurice C. McKain, M.D., *Councilor.*

Fifth Councilor District

There is little to report from the Fifth District. The component county societies are all flourishing and holding regular monthly meetings. There have been three district meetings held during the year, each with an excellent attendance. At the second meeting held at the Union Hospital in Terre Haute, Dr. A. W. Cavins of Terre Haute was elected president of the society, Dr. Harry Ward of Coalmont, vice-president, and Dr. J. V. Richart of Terre Haute was re-elected secretary-treasurer.

The individual societies of this district have each signified their willingness to cooperate in any way possible in the state syphilis program.

O. O. Alexander, M.D., *Councilor.*

Sixth Councilor District

Conditions in general are probably better in this district than they have ever been. All the county societies are functioning with regular meetings that are well attended.

The annual meeting of the society was held at Greenfield on Thursday, May 20.

An unusually interesting program was given. The papers all elicited more than the usual amount of discussion.

An attendance record was set for the district meeting at more than 60.

Dr. Samuel Kennedy was re-elected councilor for three years.

The next meeting will be held at Richmond at a date to be determined in the future.

A resolution was introduced by Dr. Thompson, of Liberty, asking the district society to endorse Dr. E. E. Holland of Richmond, for President-elect of the Indiana State Medical Association. He had been unanimously endorsed by his county society (Wayne-Union) at the April meeting. The resolution was carried without a dissenting vote.

Samuel Kennedy, M.D., *Councilor.*

Seventh Councilor District

The Seventh District has had a very successful year. Meetings were held in all of the component societies in the district according to stated schedule. Guest speakers appeared on many of the county society programs.

The district meeting was held at Franklin on November 11 at which time the Constitution and By-Laws for the district society were adopted. We now have a president and president-elect rather than a president and vice-president as formerly was the case. Officers for 1937 elected are: President, J. H. Grimes, Danville; president-elect, E. O. Asher, New Augusta, and secretary-treasurer, Russell Sage, Indianapolis. Doctor M. Edward Davis of Chicago was the principal after-dinner speaker.

The next district meeting will be held at Danville. The date has not yet been set or the program entirely completed.

C. J. Clark, M.D., *Councilor.*

Eighth Councilor District

The Eighth District has had its regular county and district meetings, and all are reported to be having excellent attendance. The district has a slight surplus in its treasury and the meetings hereafter will be neither so comprehensive or so long. The Anderson Township Clinic for indigents has been discontinued because of lack of attendance, and various physicians are seeing these cases in their offices by appointment. No federal, state or local projects have been up for consideration, and no change in any plans are being considered as affecting local conditions any place in the district.

M. A. AUSTIN, M.D., *Councilor.*

Ninth Councilor District

Medically speaking, everything has continued in ship-shape throughout the year.

The annual district meeting was held in Crawfordsville, the members of the Montgomery County Medical Society acting as hosts. There was a good program, well attended. The entertainment moved along smoothly, and the district officers and committee members are to be commended and congratulated.

The next district assembly will be held at Noblesville, Hamilton County, on Tuesday, May 17th, 1938, the officers being Dr. R. E. Haven, president; Dr. R. W. Shanks, vice-president, and Dr. J. C. Ambrose, secretary-treasurer.

The present incumbent was re-elected as councilor for the ensuing term of three years.

FLOYD T. ROMBERGER, M.D., *Councilor.*

Tenth Councilor District

The Tenth District is glad to report continued progress in the medical affairs of its component societies, Lake, Jasper-Newton, and Porter Counties. Monthly meetings have been well conducted and attended, and there has been a minimum number of disturbances to call to the attention of the State Association.

The deaths that have occurred throughout the district since the last report are, of course, deeply regretted, and our satisfaction can only lie in the fact that there have been very few reported.

The regular annual meeting of the Tenth District was held at "The Spa," thirteen miles east of Broadway, Gary, Indiana, on Route No. 20. The committee arranged an extremely interesting scientific and entertaining program with a very excellent dinner. Dr. Archibald N. Hoyne spoke on the "Newer Therapy of Infectious Diseases." Dr. Charles B. Peustow spoke on "Post Operative Care," and at the banquet Dr. William S. Sadler spoke in a general way on "Mental Hygiene."

The election of officers of the Tenth District resulted as follows:

President—Dr. G. R. Douglas, Valparaiso.

Vice-President—Dr. C. H. DeWitt, Valparaiso.

Secretary—Dr. C. M. Davis, Valparaiso.

The next meeting of the Society will be held April 8th, 1938, in Valparaiso, Indiana.

N. K. FORSTER, M.D., *Councilor.*

Eleventh Councilor District

The Eleventh District holds two meetings each year—one in May and one in October. The last meeting, which was the fifty-seventh semi-annual meeting, was held in Wabash, May 17, 1937. There were 99 physicians registered at the Wabash meeting.

We have a paid up membership for 1937 of 204, the largest we have ever had. Our treasury shows a balance of $425. The program for our next meeting which will be held in Kokomo, October 27th, is now being built. We are planning to have two speakers from outside of the District and at least one from our own membership. A forenoon clinic will be under the auspices of the Howard County Society. A banquet with entertainment will be held in the evening.

Each of the seven county societies composing the District Association is active and doing good work.

IRA E. PERRY, M.D., *Councilor.*

Twelfth Councilor District

All component county medical societies of this district were visited on several occasions. They all had good programs throughout. There is nothing of unusual interest to report.

E. M. VAN BUSKIRK, M.D., *Councilor.*

Thirteenth Councilor District

The outstanding event of the Thirteenth District for this year has been the reorganization of the Starke County Medical Society. They have a small membership, but they have been very active during the year.

At present our officers are preparing the program for our annual meeting which will be held in Mishawaka during early November.

The societies in each county have been active and very good programs have been presented during the year.

W. B. CHRISTOPHEL, M.D., *Councilor.*

REPORT OF EXECUTIVE COMMITTEE

House of Delegates and Council,
Indiana State Medical Association
Gentlemen:

I. INTRODUCTION

With the largest membership in the history of the Indiana State Medical Association, the Executive Committee takes great pleasure in reporting to the House of Delegates that despite floods, social changes, great economic problems and a period of world-wide uncertainty and strife, the profession of Indiana, as represented by the Indiana State Medical Association, has completed what is perhaps the most successful of its eighty-eight long years of existence. More and better medical programs, both from a scientific and a fellowship standpoint, have been held under the auspices of the state association and the district and the local county medical societies than ever before. The profession, as never before, has been aroused to the part it must play if medicine continues to be a dominant factor in Indiana. Everywhere, almost without exception, organizations have reported a rebirth in activity and a comeback among the individual physicians from the depression days.

This increased membership and these added activities necessarily have placed added burdens upon the officers of the Indiana State Medical Association and the Executive Committee which, under the Constitution and By-Laws of the State Association, serves as directing head of the organization and the headquarters office at those times when the Council or the House of Delegates are not in session.

The duties of the Executive Committee fall into three categories:

(1) Administrative.

(2) Business management of THE JOURNAL.

(3) Control of medical defense activities.

II. ADMINISTRATIVE DUTIES

1. Headquarters Office. One of the principal duties of the Executive Committee is the direct responsibility and supervision of the headquarters office. In addition to the regular monthly meetings of the Committee, scarcely a day passes when an informal conference having to do with the affairs of the Association is not held by some member of the Executive Committee at the headquarters office.

2. Medical Economics and the Battle Against Socialization of Medicine. Throughout the year the Executive Committee spent much time in formulating ways and means to study and combat the movement to socialize the practice of medicine in the United States. This one subject alone has taken up many hours of both formal consideration and informal discussions by the officers of the Indiana State Medical Association and the members of the Executive Committee. Following the precepts laid down by the American Medical Association concerning socialized medicine, the Indiana State Medical Association has presented a militant and unified front against all movements to socialize the practice of medicine. In this respect its deliberations have covered practically every phase of the subject, from individual local instances to broad international trends. Among the various phases of this subject dealt with by the Committee during the past year, the following are outstanding:

(1) *Public tuberculosis clinics.* The attention of the Committee was called to certain newspaper publicity that appeared concerning public tuberculosis clinics in the southern part of the state and word was received from the director of the Boehne Tuberculosis Hospital at Evansville that "It is the policy of all clinics to accept no patients who can pay, unless referred to the clinic by the family physician, or if they cannot pay to be referred to the clinic by some organized social agency."

A letter from M. A. Auerbach, executive secretary of the Indiana Tuberculosis Association, in regard to tuberculosis clinics follows:

> "Our relationship with the medical profession has been very good and, of course, we want this to continue. We urge to the fullest the strictest observance of ethical considerations in the conduct of clinics and I believe you will find this amply covered in the statement of policy.
>
> "The clinic should be diagnostic in purpose. The general policy should be followed that patients who are under the care of a physician and who come to the clinic should have the consent of such physician. Persons who are under the care of no physician, however, shall be eligible for examination and if found needing medical care, should be advised by the clinician to consult his or her own physician. In the event that the patient has no such doctor, he should be advised of the necessity of procuring one but no recommendation regarding any one doctor should be made. In no case shall the clinician treat the patient or solicit any business. He may, however, exact a charge when requested by a local physician to visit a patient in the home when such patient's physician is agreeable to such charge being made. When the physician does this, however, he is acting as a private consultant. It shall be the policy of the local association conducting the clinic to ascertain so far as possible whether the patient who comes to the clinic is able to pay for an examination, and care should be exercised against admitting such person. The clinic is primarily for those who are unable to pay for the service offered. Patients who are referred to the clinic by a physician shall be accepted without question. The local association also should attempt to secure the approval of the local medical society before establishing the clinic for the first time in the county."

(2) *Health cooperatives.* Although many rumors

have been circulated during the past months and Dr. J. P. Warbasse, president of the Cooperative League of the United States, in his speech at the National Conference of Social Work in Indianapolis definitely said there were several health cooperatives in Indiana, the only one of which the Executive Committee has definite information is the one at Economy, Indiana. According to the latest information, some sixty families are enlisted in the mutual health movement of that community, which is far below the estimated number mentioned in the original plan as being necessary to make the movement workable. According to the original plan, two hundred families were expected to sign up for the service.

(3) *Dr. Ochsner's book.* The Executive Committee authorized the purchase of 115 copies of Dr. Edward H. Ochsner's book entitled, "Social Security," to be sent to each freshman medical student. This book tells of the experience that Germany and other countries have had with socialized medicine and opposes such a movement here in this country.

3. Group Hospitalization. Although several insurance companies are writing group hospitalization policies in Indiana, the movement in this state has not gained headway and so far as the Executive Committee knows, no group hospitalization programs are actually in effect in any community.

4. Agreement with National Resettlement Administration. Following numerous conferences with national, divisional and state authorities of the National Resettlement Administration, the Executive Committee drew up the following agreement in regard to the rendering of medical services to clients of the Resettlement Administration only:

"I. (a) That the County Medical Societies recommend to the physicians in their counties that they furnish to the Resettlement Administration clients and their families the services usually rendered by a family physician at such fees as the families are able to pay. This service is to consist of home and office care, including obstetrical care and ordinary drugs. It will not include major operations or hospitalization.

(b) A specified maximum fee for all surgical operations shall be agreed to by representatives of the Resettlement Administration and each county medical society.

"II. The Indiana State Medical Association will recommend: (a) To the County Medical Societies that they urge the physicians of their counties to cooperate with the Resettlement Administration in the matter of providing medical care for their clients.

(b) That all questions concerning bills for medical services rendered under any program that is drawn up with the Resettlement Administration be referred to a committee of the local County Medical Society composed of the president, secretary and board of censors. If this committee cannot come to an agreement in regard to these bills with all parties concerned, the questions will then be referred to the Executive Committee of the Indiana State Medical Association.

(c) That the County Medical Society work with the County Rural Rehabilitation Supervisor and advise him of the physicians who have agreed to participate in this program.

"III. The Resettlement Administration will:

(a) Have a representative, the local Rural Rehabilitation Supervisor, meet with the officers of the County Medical Society and advise them who are Resettlement Administration clients in the county.

(b) The County Rural Rehabilitation Supervisor will advise the clients of the names of physicians who are willing to cooperate. The client will select the physician of his choice. The County Rural Rehabilitation Supervisor will then give to the client a memorandum for the physician showing that he is a client of the Resettlement Administration. The client and physician will then work out an agreement.

(c) 1. The County Rural Rehabilitation Supervisor will take an application for loans for the payment of the fee agreed upon. If the loan is approved, the Supervisor will advise the physician. These funds will be made available for payment at such intervals as may be deemed advisable; payments to be made after the services have been rendered.

2. The Rural Rehabilitation Supervisor will endeavor to secure funds either through grants or loans to take care of emergency surgical cases.

(d) The representatives of the Resettlement Administration, State and Regional, will work with the Indiana State Medical Association in this program, it being thoroughly understood by the Resettlement Administration representatives that such a program will be made available only to those low-income farm families that are the responsibility of the Resettlement Administration."

This agreement has served as a model for like agreements in several other states.

5. Social Security Act. With the passage of the Social Security Act and the increased interest of governmental agencies in health matters, the following special committees have been appointed to function as liaison and cooperative groups working with the official governmental agencies:

(1) Advisory committee functioning with the Bureau of Maternal and Child Health.
(2) Liaison committee functioning with the Crippled Children's Bureau of the State Department of Public Welfare.
(3) The Executive Committee acting with the Resettlement Administration.
(4) The Executive Committee acting as an advisory committee for the state-wide cancer

program of the Indiana Federation of Women's Clubs.

(5) Venereal disease control committee. Following the recommendation of Surgeon General Parran, United States Public Health Service, this committee was appointed to cooperate with the State Division of Public Health.

6. Division of Fees. Upon many occasions during the year, the Executive Committee discussed this problem in one form or another. It is the feeling of the Committee that sooner or later the Indiana State Medical Association is going to have to do something more about this problem than merely passing resolutions. This practice, the Committee feels, is one which eventually will lead to the socialization of medicine if it continues unrestricted.

7. Public Health Nurses. Many requests have been made by local county medical societies in regard to the employment of public health nurses. The Executive Committee states that the policy of the State Association in the past always has been that public health nurses should be employed only with the consent and approval of each county medical society. The Committee understands that recently several counties have employed nurses with the approval of the county medical society and that these nurses are working directly under the medical advisory committee of the county medical society which outlines the nurse's duties and the scope of her work. The Committee feels that the entire matter of the employment of public health nurses is up to each local county medical society as each county society should know the needs of its own community for such a nurse.

8. The Flood. The profession of southern Indiana is highly commended by the Committee for its courage, untiring work, bravery in the face of danger, and efficient manner in which it conducted itself and saved the lives of many Hoosier citizens during what has been termed "the greatest peacetime disaster in the history of America," the flood. Having lost contact with the profession in the southern part of the state, the Committee authorized the executive secretary to make a trip to the flooded district and upon behalf of the officers and the Executive Committee of the State Medical Association, offer the services of the entire medical profession of the state to their professional brethren in the southern counties. Many of the physicians suffered great individual losses and all physicians rendered hundreds of dollars worth of their services free of charge to their communities, often at the sacrifice of their own health and property.

As many county medical societies made liberal contributions to the Red Cross, and as many physicians made individual contributions, the Executive Committee, after discussing the matter at great length, decided that the Red Cross was the proper agency to rehabilitate those physicians who had lost possessions during the flood. Hence the material gathered by the Executive Committee from the councilors of those districts affected and by questionnaires to individual physicians living in the flooded areas was turned over to the proper Red Cross authorities for their information.

The Committee here wishes to thank the medical organizations and individuals of many other states who expressed their concern and sympathy for the profession of southern Indiana and offered their services during this crisis.

9. Commendations of Committee. During the year the Executive Committee has referred several special matters to certain specified committees for action. It referred the matter of the newspaper articles in regard to the Indiana University Psychology Clinics to the attention of the Mental Hygiene Committee of the State Association and it commends the committee for its detailed study and final solution of the matter.

The Committee also turned over the detailed arrangements for the postgraduate meeting to the Graduate Education Committee and it herewith commends the committee for the splendid work it did.

The Committee particularly wishes to commend the Legislative Committee for its fine services during the session of the legislature and in covering the Social Service Conference which was held in Indianapolis in May.

The Committee highly commends the series of articles that have appeared in The Indianapolis *Times* and Scripps-Howard papers throughout the country entitled, "The Seven Horsemen of Death," written by David Dietz, and the articles on venereal disease that have appeared in The *Times*.

III. THE JOURNAL.

1. The Journal, whose business affairs are in charge of the Executive Committee, continues to prosper and "grow fat" for its pages increase in number each year. The average number of pages per issue for the years 1933-1936 (since The Journal has been published in Indianapolis under the management of the Executive Committee) is as follows:

	1933	*1934*	*1935*	*1936*	*1937**
Reading	53	51	59.33	56.67	52.25
Advertising	29	34	35.67	39.33	41.75
Total	82	85	95	96	94
Total pages during each year:					
Reading	634	612	712	680	
Advertising	358	408	428	472	
Total	992	1,020	1,140	1,152	

* 8 mos. only.

The remaining four numbers of the present volume will average more than 100 pages each, so that the average number of pages per issue for 1937 is expected to exceed that of any previous volume.

The figures indicate a considerable increase in advertising pages and it is fortunate that this

was so, for the increase in printing costs in 1936 required close figuring and we were barely able to make ends meet for 1936. This year the reading pages will exceed the number printed in 1936 (408 through August of 1936; 418 through August of 1937), and this is possible only through increased advertising revenue. Paper costs have increased and further rises are predicted. Paper costs have made it necessary to change the stock used and in spite of every reasonable economy, the printing expense of THE JOURNAL has risen a little more than six per cent in the eight months of 1937.

2. Printing Contract. The present printing contract was a one-year agreement, beginning in February, 1936. The Executive Committee authorized continuance of the agreement through December, 1937. However, in view of the present fluctuations in paper and printing costs, it is advisable to obtain a new contract to begin with the January, 1938, issue. Bids will be solicited in October from all printers who had submitted bids upon this work previously, as well as from numerous publishing companies which have asked permission to bid for the contract whenever it is to be renewed. There is no dissatisfaction with the quality of the work supplied by the present printer, and it is only with a view to conserving the finances of THE JOURNAL that a change is contemplated now. A high quality of work is imperative to maintain the standing of THE JOURNAL, and under no circumstances will a lesser quality be accepted in order to obtain a lower price. If printing costs continue to mount, your Committee believes that it would be wiser to curtail the number of pages rather than to permit inferior material and workmanship to appear in THE JOURNAL.

3. Advertising. The average number of advertising pages per issue has increased steadily since 1933, in spite of rigid adherence to the strict rules concerning the acceptance of advertising. The number of pages in THE JOURNAL could be doubled within a short time if your Committee would sanction the acceptance of advertising which perhaps many of you would not find objectionable. For the month of July alone contracts totaling $456 were refused because the products to be advertised did not meet the requirements for advertising in THE JOURNAL. However, some of these same products are advertised regularly in local bulletins.

Every JOURNAL advertiser is reliable, is an active supporter of your organization, and therefore deserves your reciprocal patronage. Ask the detail men who appear in your office whether or not the products they offer are advertised in THE JOURNAL —and if not, why not? Your cooperation in supporting the standards of advertising in THE JOURNAL is essential, for the value of advertising in THE JOURNAL depends upon the members of the Association who read the advertising and patronize the advertisers.

4. Journal to Students. For several years, subscriptions to THE JOURNAL have been offered at a cost of $1 per year to junior and senior medical students in the Indiana University School of Medicine, and continued through interne years when requested. The students thus are kept in touch with organized medicine and obtain some realization of the value of the Association to them so that they will not delay in seeking affiliation with their local county medical society when they enter private practice. The response to the offer has been very gratifying and your Committee believes the policy has been very worthwhile and should be continued.

5. Appreciation from Another State. To give some indication of the standing of your own JOURNAL in comparison with other state journals, the following is quoted from a member of the State Department of Health of Kentucky: "I have recently had an exhibit of all state journals at the annual meeting of the Kentucky State Medical Association at Paducah, and I am very happy to tell you that your journal was the most admired of any of the others. Its general make-up, its illustrations and the program attracted special attention."

IV. MEDICAL DEFENSE ACTIVITIES

1. Honorary Membership and Medical Defense. The question was brought to the attention of the Committee as to whether or not a physician who is an honorary member of the Association is entitled to the benefits of malpractice defense under the Constitution and By-Laws of the State Medical Association. This matter first came up for discussion on December 3, 1933, and the minutes of the Executive Committee at that time read as follows concerning this matter:

> "Are honorary members entitled to malpractice defense? Opinion of Albert Stump is that honorary members are not entitled to malpractice defense. 'If there is no change made in the By-Laws to meet this classification of honorary members, I do not believe that the honorary member would be entitled to medical defense. Section 7, of Chapter 12 of the By-Laws makes the payment of dues a condition upon which the right to defense depends.' "

At the meeting of the Committee on April 4, 1937, the attorney for the Association said, however, that the By-Laws could be interpreted several ways and the Committee went on record to allow medical defense protection to honorary members in consideration of the fact that they had contributed to the medical defense fund over a period of years.

2. Medical Defense Plans in Ohio and Illinois Discontinued. Due to the recent action arising out of a ruling of a committee of the American Bar Association that a state medical association was practicing unauthorized law in the operation of its medical defense plans, the defense plans as now written

in Ohio and Illinois have been discontinued. The attorney for the Indiana State Medical Association has made a study of the provisions for medical defense offered by the State Association and makes the following suggestions in regard to changes in the wording of the medical defense features of the By-Laws covering medical defense:

"There is one point on which we believe there might be some question raised by the Bar Association as to whether the Medical Association engages in the practice of law. Section 3 of Chapter XII includes provisions which were allowed to remain from some previous By-Laws adopted before this question of the unlawful practice of law began to be agitated by the Bar Association. It contains the provision giving to the Committee the power to summon and employ expert witnesses and incur such other expenses as in the judgment of the Committee may be necessary in the defense of members. Section 10 is the provision requiring an agreement that the case shall not be compromised or settled without the consent of a majority of the Committee of Medical Defense.

"Those two provisions I feel should be given some consideration with a view to modification at the next meeting of the Executive Committee. After such consideration it may be advisable to suggest amendments to the By-Laws in this regard, to avoid any difficulties which might otherwise develop through the Bar Association. Up to this time I have heard no comment from any source whatsoever concerning the medical defense plan of the State Association."

Hence, the Executive Committee recommends changes in the By-Laws as drawn up by the attorney of the Association.

3. Malpractice Cases. A year ago at the time of this report, September 1, 1936, the following twenty cases were pending before the Committee, ten of which were closed during the year, leaving ten cases still pending:

Case No. 129—Pending. No new developments since 1925.

Case No. 156—Suit filed March 27, 1928. Case pending. Verdict for plaintiff after six days' trial in 1933; case to be appealed. Expense, $66.28, paid September 23, 1929; $350.00, paid June 30, 1933.

Case No. 162—Case tried in 1928, and postponed. Terminated by death of defendant.

Case No. 170—Suit filed June 2, 1930. Dismissed without trial because of "lack of merit."

Case No. 176—Suit filed March 28, 1931. Terminated by death of defendant February 11, 1936.

Case No. 194—Suit filed July 9, 1932. Case tried, with verdict for the defendant.

Case No. 197—Suit filed December 20, 1932. Final judgment for defendant entered January 11, 1937, on refusal of plaintiff to plead over. Expense, $250.00, paid April 12, 1937.

Case No. 200—Suit filed February 12, 1932. Pending.

Case No. 201—Suit filed December 11, 1933, and refiled on June 11, 1934. Case dismissed September 18, 1936, at expiration of statute of limitation. Expense, $100.00, paid October 15, 1936.

Case No. 202—Suit filed August, 1934. Court overruled plaintiff's demurrer and plaintiff will take an appeal. Expense to date $100, paid April 12, 1937.

Case No. 203—Suit filed August 21, 1934. Pending.

Case No. 204—Suit filed December 4, 1934. Trial October 24 and 25, 1935. Argument on motion for new trial December 19, 1935. Plaintiff's motion for new trial overruled January 17, 1936. Case dismissed November 5, 1936. Expense, $300.00, paid on March 5, 1936, and $100.00 paid on December 14, 1936.

Case No. 209—Suit filed March 1, 1935. Case dismissed July 17, 1936. Expense, $100.00, paid October 15, 1936, and $100.00, paid January 13, 1937.

Case No. 210—Suit filed September 18, 1935. Pending.

Case No. 211—Suit filed July 11, 1935. Case dismissed by plaintiff on December 14, 1936. Expense, $100.00, paid January 13, 1937.

Case No. 212—Suit filed November, 1935. Case tried December 2, 1936. Nine days' trial and argument; verdict against defendant; case to be appealed by defendant. Expense to date, $293.15, paid January 13, 1937.

Case No. 213—Suit filed December 1, 1935. Case dismissed January 21, 1937. Expense, $100.00, paid February 23, 1937.

Case No. 214—Suit filed April 1, 1936. Pending.

Case No. 215—Suit filed and defendant ordered to appear June 22, 1936. Pending.

Case No. 216—Suit filed March 16, 1936. Pending.

Since September 1, 1936, and up to August 1, 1937, the following four new cases have come before the Committee, three of which have been closed, making a total of eleven cases pending at the present time as against twenty unclosed cases at the same time last year:

Case No. 217—Suit filed January 13, 1933. Terminated by death of plaintiff.

Case No. 218—Suit filed August 31, 1936. Two days' trial; verdict for defendant. Expense, $161.27, paid June 2, 1937.

Case No. 219—Suit filed March, 1934. Verdict against defendant; case to be appealed.

Case No. 220—Suit filed in fall of 1936. Compromise settlement of $500.00; case dismissed June 23, 1937. Expense, $150.00, paid July 19, 1937.

The total cost for medical defense from September 1, 1936, to August 1, 1937, was $1,554.42. The cost for the preceding year was $1,461.75.

4. Medical Defense Fund Statement, from September 1, 1936, to August 1, 1937:

Balance, September 1, 1936		$2,281.21
Deposits:		
Dues, 1 — 1935 member @ 75c	$ .75	
78 — 1936 members @ 75c	58.50	
2,871 — 1937 members @ 75c	2,153.25	2,212.50
Interest on bonds		165.01
		$4,658.72
Disbursements:		
Malpractice fees	$1,554.42	
Salary of Association attorney	550.00	
Treasurer's bond	15.00	
Miscellaneous	.10	2,119.52
Balance in checking account August 1, 1937		$2,539.20

V. CONCLUDING RECOMMENDATIONS OF COMMITTEE

1. Gratuitous Medical Service. The Committee recommends that local county societies of Indiana follow the recommendation passed by the Polk County Medical Society, Des Moines, Iowa, requiring each member of the society to submit for review by the board of censors of that society a list of all of the hospitals, out-patient departments and clinics to which he gives gratuitous medical service.

2. Commercial Medical Directories. Following the action of the House of Delegates of the American Medical Association at the Kansas City session concerning professional medical directories, the Committee recommends that all physicians who are solicited to take space in so-called professional directories investigate these directories thoroughly and obtain information from the American Medical Association or the Indiana State Medical Association before allowing their names to be used.

An investigation by the Executive Committee of one of the directories which purports to be a reference book for insurance companies and industrial organizations in selecting their medical representatives and which carries the names of physicians for $10.00 each, developed the fact that only a few insurance companies ever referred to this or any other directory of this sort.

3. Support of JOURNAL Advertisers. It is strongly recommended that, as the Indiana State JOURNAL is one of the leading publications of its kind and that in view of the fact that THE JOURNAL depends upon the support of its advertisers, every physician in the state of Indiana support THE JOURNAL advertisers and all things being equal, insofar as possible make their purchases from those concerns which advertise in THE JOURNAL. Only advertising which has the approval of the American Medical Association appears in THE JOURNAL.

4. Northwest Conference. As Indiana is to be the host for the Northwest Conference which is to be held in Chicago in February, 1938, which brings together the officers and heads of the various important committees of the medical societies of Illinois, Minnesota, Wisconsin, Ohio, Nebraska, North and South Dakota, Michigan, and Indiana, it is recommended that every physician in Indiana who is able to attend, be present at this conference. The dates of this conference will be announced later.

5. Dr. Heyd's Statement Against Health Insurance. Your Committee recommends that every physician in Indiana learn by heart the following statement made by Dr. Charles Gordon Heyd, president of the American Medical Association in regard to health insurance:

> "Dr. Heyd said health insurance systems developed in Germany and England were less efficient and 'put a premium on malingering and extension of days of illness.' The outstanding defect of the British and German systems, he said, is that they 'created a superior type of medical service for the well-to-do and a substandard type for those in the lower economic brackets.' . . . Condemning any form of cash benefits for sickness, Dr. Heyd said the average loss of time of workers for illness in the United States was only six and one-half days as compared with thirteen in Germany and eleven and one-half in England."

6. Throw-Away Journals. The Committee recommends that no physician in Indiana give his permission to have any articles he writes reprinted in a journal such as *Medical Economics* or one of the other so-called throw-away publications without first taking the matter up with the Executive Committee. These sheets are filled with advertising which is not approved by the American Medical Association and as such do not deserve the support of reputable physicians. In order to guard against the reprinting of articles that appear in THE JOURNAL of the Indiana State Medical Association, the Executive Committee has had THE JOURNAL copyrighted since 1935. Following the lead in Indiana, many other state societies have begun copyrighting their magazines. It is understood that these throw-away publications are making every effort to use the names of prominent physicians as contributors to their journals.

7. Condemnation of Extraneous Societies. The Committee recommends vigorously that the numerous so-called academies and other medical societies that take the physicians away from the regular county and district medical societies be discontinued. By this the Committee does not mean to include such organizations as the Indiana Academy of Ophthal-

mology and Otolaryngology, but it does mean those local organizations which divert the interest of the profession from the local county medical societies and from the district societies and tend to affect the unity and cohesion that is necessary for good professional organization work in the various communities. The Committee recommends that all of the profession's energy and financial backing should be given to the development of local county and district medical societies.

8. Venereal Disease Control Program. The Executive Committee commends the venereal disease control program that is being worked out by the State Venereal Disease Control Committee and several of the local county societies of the state and recommends that each county medical society study this problem locally and work out its own program for the coming year in coordination with the state committee and the State Division of Public Health.

9. Appointment of Graduate Education Committee. The Committee authorized Dr. Herman Baker, president-elect, to appoint the 1938 Committee on Graduate Education and recommends that this committee start work immediately to arrange for the 1938 postgraduate program.

Respectfully submitted,

Cleon A. Nafe, M.D., *Chairman*,
C. H. McCaskey, M.D.,
M. A. Austin, M.D.,
E. D. Clark, M.D.,
Herman M. Baker, M.D.

REPORT OF THE COMMITTEE ON PUBLIC POLICY AND LEGISLATION

House of Delegates,
Indiana State Medical Association

Gentlemen:

Changes in Medical Practice. In this day of changes in an economic and social way, the practice of medicine also is changing. Some of these changes have already occurred, and some are being contemplated. Some are distinct improvements; others may be disasters.

Social Reformers. The present-day practice of medicine as well as that of the future, differs from that of former years in many respects. These differences are of two sorts. First: those innovations conceived by the profession itself and, second, those contemplated changes instigated by so-called social reformers, political and lay.

New Methods of Practice. The medical profession has long been awake to the need of adapting itself to current conditions. Examples of the improvements in medical practice brought about by the profession itself are numerous. Probably the most outstanding of these improvements is the fact that a patient coming to the doctor today is not only received in a highly personal and sympathetic manner, but he also undergoes a carefully planned system of history taking and examination leading to a high degree of efficiency in diagnosis upon which accurate, modern, scientific treatment may be based.

Social Obligations and How They Are Met. From a sociological point of view the profession recognizes that any system of practice must furnish adequate care to everyone regardless of ability to pay. This means that the public is divisible into three groups, namely: those persons able to pay full fees; those who can pay part fees; and those who are unable to pay at all. Patients able to pay full fees are not a problem. Those able to pay part fees are taken care of by many members of the profession on that basis. Many local medical societies throughout the country have established business offices whose primary duty is to investigate the ability to pay, and to help the individual doctor to work out payment plans and reduced fees. The third group, composed of those who can pay nothing, are taken care of in various ways. In many cities, clinics and hospitals are available for the indigent. In rural communities, individual doctors do this work for which they are paid reduced fees by township trustees.

Profiteering. It is unfortunate that there are probably some physicians in certain localities who are so short-sighted that they demand payment for everything they do, not at reduced fees, but fees based on the theory of "get all you can get." This method not only leaves the impression that the practice of medicine is commercial, but tends to shatter faith in the traditions of the profession which were established by the sacrifices and ordeals of the old family doctor with his horse and saddle bags.

Social Legislation. During the year, your committee has been concerned with many problems. The first major problem was the legislature and it was during the sessions of that body that we realized more than at any other time the necessity of maintaining the above concepts of medical practice. This realization was due to the fact that we not only had to fight against the usual cult groups, but spent much of our time concerned with the medical aspects of social legislation. (A complete review of the legislation activities will be found in the March, 1937, issue of The Journal of the Indiana State Medical Asosciation.) From the standpoint of state legislation, it is imperative that every county medical society realize it has two important jobs to do.

Jobs to Do. 1. To see that the system of medical care is such that everybody in the county receives adequate care on a basis which will not lead to profiteering, but on a basis of reasonable fees and free choice of doctor.

2. It is imperative that each county society become sufficiently conversant with partisan poli-

ties so that it may have some influence in keeping undesirables out of our legislature.

Federal Government Practice of Medicine. There has been much talk of the Federal Government instituting a program of medical care. At the present time we believe there is no immediate danger for the following reasons: the cost would be too great, and the profession is unified in the belief that such a plan would be detrimental to the public health and welfare.

Health Cooperatives. Your committee has also been concerned with the rapid development of the so-called "cooperative movement." For years, "cooperatives" have been functioning for the purpose of mass buying and selling of produce. Recently, there have been attempts to form so-called "Health Cooperatives." These groups work as follows:

A group of people organize and employ a physician to render complete medical care on either a salary basis or a fixed fee per month per family basis. We have consistently discouraged such care for the following reasons:

It does away with free choice of doctor; it cheapens medical practice; it lowers the standard of the care rendered.

Thanks for Your Help. We have attempted in this report to give you some idea of the problems facing your committee. We wish to take this opportunity to thank every member for the excellent cooperation we have received throughout the year. We realize we could have done but little without the aid of the "folks back home," along with the untiring efforts of our reliable secretary, Thomas A. Hendricks.

The Future. In closing, we wish to say emphatically that if the profession will continue to care for all the people in the splendid way it has in the past, there will be no need for any social reforms in medicine and we will continue to carry on the fight with the knowledge that victory is ours.

Respectfully submitted,
NORMAN M. BEATTY, M.D., *Chairman*,
O. T. SCAMAHORN, M.D.,
GEORGE DANIELS, M.D.,
GEORGE DILLINGER, M.D.,
W. W. WASHBURN, M.D.,
E. L. SCHAIBLE, M.D.,
J. WILLIAM WRIGHT, M.D.,
KEITH T. MEYER, M.D.,
B. J. LARKIN, M.D.

HAVE YOU MADE YOUR

HOTEL RESERVATION?

REPORT OF THE BUREAU OF PUBLICITY

House of Delegates,
Indiana State Medical Association

Gentlemen:

I. INTRODUCTION

With increased public interest in health matters during the past year the Bureau of Publicity finds that the field of its work is rapidly enlarging. Passage of the Social Security Act, added impetus under the direction of the United States Public Health Service in the battle against venereal disease, new interest of the public in campaigns against cancer, tuberculosis, pneumonia and diphtheria, have all but overcome and swamped some of the state medical societies. But this has not been so in Indiana for in this state fortunately the transition from old to new ideas has been comparatively simple and "easy to take," largely due to the fact that the Bureau of Publicity had been accustomed to carrying on these campaigns in the State of Indiana long before they were undertaken as nation-wide projects involving the medical profession in every state of the Union.

Meeting as it has during the past year almost every week, the Bureau has been able to keep in touch with the new movements as they developed, and through its releases to the newspapers and speakers before lay audiences and county medical societies, the Indiana State Medical Association has been an able leader and director in these various movements. Just how important such leadership has been, both to the public and to the profession, may well be realized when a comparison is made between the constructive work that has been done here in Indiana with much of the ill-advised and often valueless attempts that have been made in some other states. Here in Indiana we have bent every effort through the Bureau to keep all health matters where they should be kept, under the direction of a progressive, well-informed, intelligent and active medical profession. Thus the people of the State of Indiana are in a position to receive the benefits of these various health campaigns without falling victims to much of the ballyhoo that has characterized many so-called health campaigns that in so many cases have become mere sideshows and not real public health and welfare projects.

The Bureau of Publicity in these matters has been able only to point the way and make suggestions. It has been up to each local county medical society to take the lead in its own community. In all of these local endeavors, the Bureau has always been at the service of the local county medical societies by helping and giving suggestions that might aid in making these various local health undertakings effective. The Bureau hopes and strongly recommends that in the future each county medical society should have definite committees which will be at the service of the citizens of each community and will be so active that no

community in the state will put on a health project without the aid and consultation of these various local committees. The Bureau feels that this is the only way, with the rising tide of public interest in health matters, that the best scientific knowledge may be available to the citizens of each community. Among the county societies that have such committees at the present time are: Lake, Marion, Vigo, St. Joseph, and the newly created committee on public health education of the Delaware-Blackford County Medical Society which is carrying out a campaign of civic health education through the use of the radio and talks before civic organizations and luncheon clubs.

II. BUREAU'S WORK WITH VARIOUS PUBLIC HEALTH AND WELFARE AGENCIES

As in the past, close cooperation was maintained by the Bureau with the following lay and semi-lay health groups:

Indiana Tuberculosis Association.

Indiana Congress of Parents and Teachers — summer round-up.

Indiana Federation of Women's Clubs — cancer campaign.

Mental Hygiene Society.

Indiana State Fair Commission. The Bureau cooperated with the State Fair Committee of the Indiana State Medical Association in preparing 5,000 pamphlets entitled, "Information Regarding the Prevention of Contagious Diseases," which were distributed at the state fair.

Indiana Hospital Association.

However, the two principal groups with which the Bureau worked throughout the year was the Bureau of Maternal and Child Health of the State Division of Public Health in its campaign to reduce the maternal and infant mortality rates and the United States Public Health Service in its campaign against venereal diseases.

The director of the Bureau of Maternal and Child Health of the State Division of Public Health met many times with the Bureau of Publicity and discussed and outlined a splendid program embodying thorough cooperation with the organized medical profession of the state. The following suggestions were made in regard to cooperation of the Bureau of Publicity with the Bureau of Maternal and Child Health of the State Division of Public Health:

1. The Bureau will not assume the responsibility of endorsing a list of speakers and subjects for any other agency.

2. The Bureau suggests that speakers making talks on maternal and child health programs speak on subjects very *directly and logically* connected with maternal and child health.

3. As a basis for cooperation with the State Board of Health, it is suggested that the Bureau of Publicity adopt the policy for the time being of referring any requests for speakers on subjects definitely connected with maternal and child health to the Bureau of Maternal and Child Health. Likewise, it would seem to be a proper policy for the Bureau of Maternal and Child Health to refer to the Bureau of Publicity requests for speakers on subjects which are not specifically related to the maternal and child health campaign.

As a result of these suggestions from the Bureau of Publicity, the chief of the Bureau of Maternal and Child Health eliminated all subjects not directly connected with maternal and child health.

The Bureau feels that one of the outstanding contributions of the Bureau of Maternal and Child Health of the Indiana State Division of Public Health has been the obstetric motion picture films which have been shown in many medical society meetings by speakers sent out by the state bureau to county medical societies. These films, the Bureau feels, are of the highest scientific value and are splendid examples of visual education in technical procedures. The Bureau recommends that any county societies which have not yet had these films should avail themselves of them. A number of other motion pictures are available to lay audiences through the State Division of Public Health, along with considerable health literature for free distribution upon subjects pertaining to maternal, infant and child health, dental hygiene and communicable diseases. If ever a local county medical society desires to put on a public health program for the laity, much material upon such subjects as conduct and behavior problems, nutrition and growth, infant feeding and diet, communicable diseases, respiratory infections, surgery, hygiene, skin diseases, allergic conditions, eyes, heart, maternal care, ear, nose and throat, and other general topics are available through the State Bureau of Maternal and Child Health.

From week to week the developments of the venereal disease control program throughout the country were outlined before the Bureau and many of the speakers sent out by the Bureau made splendid educational talks to lay groups, many of whom were hearing the scientific facts in regard to venereal diseases for the first time. The Bureau has a definite feeling that all educational work along this line should be most carefully conducted and that many times more harm than good can come from ill-timed and poorly presented material upon this subject.

Campaign Against Pneumonia. This campaign is being sponsored by a life insurance company. Material in regard to this matter was studied by the Bureau and one of the Bureau's releases dealt with the subject. After a complete report upon this campaign was made by the Bureau, the entire correspondence along with the report of the Bureau was forwarded to the State Division of Public Health.

III. HISTORICAL WORK OF THE BUREAU

(1) Pioneer Memorial Committee. During the year, the members of the Bureau of Publicity, cooperating with the state Pioneer Memorial Committee

of the State Association, paid visits to the graves of Jane Todd Crawford at Sullivan, Indiana, and Doctor John L. Richmond, of Lafayette, Indiana. These visits were indeed very much worthwhile and an account of them appeared in THE JOURNAL of the Indiana State Medical Association. The Bureau at this time wishes to thank the local profession at Sullivan and at Lafayette for their interest in preserving the memory of these medical heroes and to commend the Pioneer Memorial Committee for its splendid work in this regard.

At Sullivan County, the publisher of the newspaper is very much interested in the project of the Sullivan County Medical Society and the State Association to memorialize Jane Todd Crawford. Through his efforts, according to reports, the cemetery in which Mrs. Crawford is buried has been landscaped and an improved road built from the main highway to the grave.

The Bureau recommends that the Pioneer Memorial Committee, as soon as practicable, complete the preliminary arrangements for the placing of the proper markers at the graves of the following Indiana medical pioneers:

a. Mrs. Jane Todd Crawford, who is buried near Sullivan, Indiana. In 1809 Doctor Ephriam McDowell performed the first operation in the world for ovarian tumor upon her.

b. John Lambert Richmond, M.D., who is buried in Spring Vale Cemetery, Lafayette, Indiana. Doctor Richmond, in April, 1827, did the first cesarean section west of the Alleghany Mountains in what was then the United States of America.

c. John Stough Bobbs, M.D., buried at Crown Hill, Indianapolis, who performed the first gallstone operation in the world.

d. Mrs. Z. (Mary E.) Burnworth, Doctor J. S. Bobbs' patient, who is buried at Oaklandon, Indiana.

The suggestion of the Bureau to the Pioneer Memorial Committee of the Woman's Auxiliary follows:

1. All graves to be fenced in. A single railing will be sufficient.

2. Original stone markers are to be left untouched.

3. Stone slabs to cover entire grave, or the erection of a marker at the side of each grave is suggested.

4. A bronze tablet to the pioneers is to be placed at the medical school.

The relatives of each of the pioneers are to be visited and permission obtained to construct the rail fencing and the memorial markers as suggested by the committee. The fear was expressed that if bronze tablets were placed at the graves, these would be stolen.

The following letter was written to the State Highway Commission regarding memorial tablets that are being placed in the state highways in the vicinity of the cemeteries where the medical pioneers are buried:

"In accordance with your suggestion as the result of our telephone conversation of yesterday, I am sending you the names of the medical pioneers whom the Indiana State Medical Association and the Woman's Auxiliary to the State Association intend to memorialize:

(Recommendations of the Bureau quoted.)

"The State Association intends to mark the grave sites of these pioneers and the suggestion also has been made that markers be placed on the highways in the vicinity of the graves of these medical pioneers. If you or any members of the committee who have charge of the erection of such highway markers, desire any further information in regard to these pioneers or the contemplated project of the State Association, we would be very pleased to talk with you."

The following letter was received from the chairmain of the State Highway Commission of Indiana in answer to the Bureau's letter concerning highway markers:

"Your communication of January 6 relative to the erection of markers to commemorate the names of medical pioneers has come to my attention.

"I am passing your letter on to different ones in the department for their consideration.

"The cases you mention are indeed interesting and indicate that we had some fearsome individuals here in Indiana long years ago."

(2) Greeting to John R. Kissinger, of Huntington, Indiana. The Bureau of Publicity sent New Year's greetings upon behalf of the profession of Indiana to John R. Kissinger, of Huntington, Indiana, one of the few survivors who submitted himself to Dr. Walter Reed's experiments in Cuba.

In answer to this message, the Bureau received the following reply from Mr. Kissinger:

"Your letter of the 29th received and I wish to thank you and the Association for the pleasant greetings for the New Year, and in return, Mrs. Kissinger and myself send greetings and best wishes to you and the Association throughout the New Year.

"I would feel highly honored to know that my name was placed on your records in the Indiana Historical Medical History, although I feel that my name would be small with the great names you have on your records.

"Again thanking you for the interest shown me, I remain

Yours respectfully,

JOHN R. KISSINGER."

(3) Historical Copy of the By-Laws of the Henry County Medical Society, Published in 1858. These by-laws were sent to the Bureau of Publicity by a Henry County physician and one member of the Bureau prepared an article upon them which will be published in THE JOURNAL.

(4) Tribute to Retiring Chairman of the Committee on Necrology of the State Association. At this time the Bureau of Publicity breaks its usual rule in regard to mentioning the names of individual physicians in commending the work that has been done for a number of years by Dr. G. G. Richardson, of Marion, who has served as chairman of the Necrology Committee. Upon the retirement of Dr. Richardson from duty, the president of the Association called upon the Bureau of Publicity to suggest a successor. The Bureau herewith recommends that the House of Delegates express its appreciation for the thoughtful and painstaking work that was done for so many years by Dr. Richardson, the retiring chairman of that committee.

IV. RECOMMENDATIONS OF BUREAU IN REGARD TO MEDICAL ETHICS

(1) The Bureau recommends that local societies adopt resolutions stating that the local profession does not desire its community newspaper to carry notices in which the names of physicians, private hospitals, or patients' conditions are mentioned. In some localities, the constant practice of having news items appear in the local papers giving the names of physicians, private hospitals and the patients treated by the physicians has become a very distasteful procedure.

(2) Is the Use of Professional Cards Ethical? Often the Bureau is asked whether or not the use of business cards by physicians is unethical. In answering these questions, the Bureau refers to the Principles of Medical Ethics of the American Medical Association to which the Indiana State Medical Association adheres. In short, the printing of such cards is not *per se* unethical, but if it is not the custom of physicians in the community to publish or circulate personal business cards, then a physician who does print such cards and who disregards local customs is guilty of bad taste and of offending the recognized ideals of the profession of his community. The Bureau of Publicity feels that a physician's name, his address, and telephone number may be permissible upon a card. If a physician limits his practice to a specialty, the name of the specialty also would be permissible. However, the Bureau emphasizes the fact that a card in itself may be thoroughly ethical and in good taste and yet the distribution of the cards might be in very poor taste and in conflict with the Principles of Medical Ethics. The Bureau states that it is inexcusable to send out cards which might in any way be interpreted as a solicitation of business.

(3) Participation of Physicians in Health Contests. Often the Bureau of Publicity is asked for an opinion as to whether or not it is ethical for physicians to render their services in local health contests which receive a great deal of newspaper publicity, such as better baby contests, etc. It is the opinion of the Bureau that it is absolutely unethical for any physician to take part in any of these contests which have not been approved by local county medical societies. It is the opinion of the Bureau that such contests could not be approved when conducted by private individuals, but only when conducted under the auspices of a local county medical society.

V. AVENUES OF PUBLICITY USED BY BUREAU

(1) Speaking Engagements Before Lay and Medical Groups. During the past year, the Bureau supplied speakers for the following meetings:

1936

October 28—Parke-Vermillion County Medical Society, Clinton.

November 10—Fayette-Franklin County Medical Society, Connersville.

November 18 — Parke-Vermillion County Medical Society, Clinton.

December 2 — Sullivan County Medical Society, Sullivan.

December 3—Jasper-Newton County Medical Society, Rensselaer.

December 16 — Parke-Vermillion County Medical Society, Clinton.

1937

January 12 — Hancock Federation of Women's Clubs, Greenfield.

February 1 — Woman's Auxiliary to the Vigo County Medical Society, Terre Haute.

February 17 — Parke-Vermillion County Medical Society, Clinton.

February 25 — Grant County Medical Society, Marion.

March 3—Sullivan County Medical Society, Sullivan.

March 19—Kiwanis Club, Tipton.

April 13 — Knox County Medical Society, Vincennes.

April 14—Parent Teacher Association, School No. 76, Indianapolis.

April 21—Summer Round-Up Chairmen of Indiana Congress of Parents and Teachers, Indianapolis.

April 21—Decatur County Medical Society, Greensburg.

April 21—Parke-Vermillion County Medical Society, Clinton.

April 27—Daviess-Martin County Medical Society, Washington.

April 28—Ball State Teachers College, Muncie.

April 28—Kiwanis Club, Muncie.

April 29—Cass County Medical Society, Logansport.

April 29—Ladies' Aid Society of the Christian Church, Wilkinson.

June 3—Fountain-Warren County Medical Society, Covington.

June 16 — Parke-Vermillion County Medical Society, Clinton.

June 22—Rotary Club, Seymour.

July 14—Rotary Club, Crawfordsville.

(2) Newspaper Releases Published Since Last Report of the Bureau:

State Fair Health Exhibit.
Annual Session of Indiana State Medical Association at South Bend (7 releases).
Hoosierland's Health Harvest.
Hints to Hoosier Hunters.
Thanksgiving Eating.
Frost-Bites.
Holiday Health.
What the Public May Expect from the Medical Profession.
Medical Conference Postponed Due to Flood.
National Social Hygiene Day, February 3, 1937.
Cancer Campaign This Week.
Hospital Overcrowding and Overbuilding.
Spring Exercise.
Spring Tonics and Spring Fever.
May Day in Indiana.
Postgraduate Course May 10 to 14.
Visit Your Hospital May 12.
July Fourth Suggestions.
Parent-Teacher Summer Round-Up.

These releases, totaling 558 at each mailing, were distributed as follows:

1. One hundred fifty to the president of the White Cross Guild of the Indiana Methodist Hospital, for distribution to members of the guild.

2. Fifty to the director of the Division of Public Health Nursing of the Indiana State Division of Public Health.

3. Fifty to the state director of the Department of Health of the Woman's Christian Temperance Union of Indiana.

4. Each councilor and the secretary of each county medical society gets a copy of each article.

5. Editors of two hundred newspapers and magazines of the state receive copies. Besides these, the articles often are carried in the *Hoosier Health Herald* of the Indiana Tuberculosis Association, and several other health publications of the state, including twelve religious, fraternal, and farm journals.

(3) Radio Talks. (a) The following radio talks have been given each week through the year on Saturday night over station WFBM, of Indianapolis:

Lye as a Poison.
Competitive Athletics.
Sport for Health's Sake.
So-Called Cancer Cures.
Ventilation.
Hoosierland's Health Harvest.
A Word to Hunters.
Cold Facts.
When Winter Comes.
Thanksgiving Eating.
Bodily Bookkeeping.
Frost-Bites.
A Merry Day After Christmas.
What the Public May Expect from the Medical Profession.
If You Have a Cold — Stop.
National Social Hygiene Day.
Lincoln History and Scientific Medicine.
Debunking the Vitamins.
Your Years and Your Age.
The Common Cold.
Home Safety.
Spring Exercise.
Spring Tonics and Spring Fever.
May Day in Indiana.
Visit Your Hospital May 12.
Vacations and Typhoid.
Sunshine.
Hot Weather Health Hints.
Poison Ivy.
July Fourth Suggestions.
Parent-Teacher Summer Round-Up.

(b) The Bureau of Publicity feels that the radio should be used more and more by local county medical societies in their public health educational work. Along this line the Bureau recommends once again that in order to avoid any criticism whatsoever that the following rule against mentioning physicians' names who are in private practice over the radio be upheld:

> The Bureau has adopted a rule that no physician who is in private practice should have his name mentioned over the radio in connection with the Bureau of Publicity broadcasts, but the names of physicians holding public office and connected with public institutions may be mentioned over the radio, if they are not in private practice.

These talks, the Bureau feels, should be entirely impersonal and should be given in plain, understandable language. Time and again the House of Delegates of the Indiana State Medical Association has gone on record disapproving the mention of the names of physicians over the radio who are in private practice. The Bureau suggests that when these talks are given by physicians who occupy full-time positions with institutions or organizations, such as superintendents of hospitals, heads of city or county boards of health, etc., the use of the names of such men would not be contrary to the action of the House of Delegates. However, the State Association rules do not approve of the use of names of those in practice. Broadcasts and newspaper releases should be impersonal and informative.

(c) Convention Radio Talks. During the 1936 session of the Indiana State Medical Association at the request of the South Bend radio station, the following talks were made by the head of the educational department of the State Division of Public Health and out-of-town guest speakers upon the subjects, "Public Health and the Public," "Pneumonia," and "Prevention of Contagious Diseases."

VI. OTHER ACTIVITIES OF THE BUREAU

(1) Advisory Committee for Woman's Auxiliary. Among other duties, the Bureau of Publicity acts as an advisory committee for the Woman's Auxiliary to

the Indiana State Medical Association. During the year the Bureau reviewed many reports of Auxiliary activities in various states. As a result of this review, the Bureau feels that the Auxiliary to the Indiana State Medical Association could undertake a program covering the following four points for the coming year:

a. Promote and arrange for an exhibit of doctors' hobbies at the state meeting.

b. Create a student loan fund for worthy medical students.

c. Promote the distribution of Hygeia.

d. Create new methods whereby companionship and friendliness among the physicians of the various communities may be encouraged.

(2) Other States Set Up Bureaus. Throughout the year a number of state and local medical societies throughout the nation have created publicity committees and have requested the Bureau of Publicity to supply them with information concerning the activities, program, routine work and method of procedure of the Indiana Bureau of Publicity. A typical acknowledgment of the Bureau's reply to a request for this information is the one received within the last few months from the Medical Society of Rhode Island which follows:

"Thank you very much for the information regarding the Bureau of Publicity of the Indiana State Medical Association which you so kindly sent me last month. I was quite impressed with the way this work has developed in your state. I only hope that we may do something equally worthwhile eventually. I would appreciate being on any of your mailing lists which you might think suitable in order that we may keep in closer touch with what you are doing, and hope to profit thereby. If we can ever be of any similar service, please feel free to call upon us."

(3) Give Credit Where Credit Is Due. The Bureau feels that too often lay organizations do not give credit where credit is due, that is, to the medical profession. A glaring instance of this is the bulletins published by the American Social Hygiene Association which outline in great detail the advancements that are being made by social hygiene agencies throughout the country and yet seldom, if ever, do they acknowledge that it is chiefly the work of the medical profession along this line. All of these organizations depend upon the medical profession for the success of their campaigns whether they be in cancer, tuberculosis, or venereal disease control, and it is the view of the Bureau of Publicity that these organizations should give credit to the various organized medical groups who are cooperating with them and making their programs effective. Voicing this sentiment, the Bureau of Publicity wrote the American Social Hygiene Association the following letter:

"For some time we have been receiving your *Social Hygiene News* and have found it very interesting. However, in this present issue, and I believe in most of the issues that have come to my notice, there has been a very painful lack of any recognition given to the doctors. You list all agencies and all cooperating groups, yet you fail dismally in your January issue in not listing any medical groups which are cooperating.

"The whole-soul cooperation of the medical profession is absolutely necessary for the social hygiene program to succeed or fail and I would regret to see your organization assume the attitude that so many lay organizations have assumed in the past of giving absolutely no recognition to the doctors, to the American Medical Association, and to the various component state and county medical societies."

The American Social Hygiene Association answered the letter in detail stating that it agreed heartily with the viewpoint of the Bureau of Publicity but so far as can be determined, their policy of ignoring the organized medical profession has continued.

(4) Commendation of Better Business Bureau. The Bureau commends highly the work of the Better Business Bureau of Indianapolis whose bulletins it has received throughout the year. Particularly does the Bureau wish to commend the Better Business Bureau upon its investigation and publication of the following quackery:

a. "Cancer Quack Advertising Refused." Under this heading, the Better Business Bureau carried a detailed report upon T. N. Walker and George Franklin Smith, of Bicknell, Indiana.

b. "Dr." J. R. Scherer, head of the Irvington Clinic, Indianapolis.

c. "Marmola, a fat reducing concoction which contains thyroid extract."

d. "Optical Swindlers."

e. "Quackery of J. R. Brinkley and His Formula No. 1020."

f. "Dr. L. R. Emerick Diabetes 'Cure'" which has been barred from the mails.

g. False and misleading advertising in connection with the sale of "Doan's Pills" and the exaggerated claims for Doan's Pills.

h. "Neet, Inc.," a depilatory, and

i. "Pinex Company, Fort Wayne, Indiana," which is advertising an alleged effective remedy for coughs.

(5) Declines Distribution of Pamphlets. The Bureau declined to approve the state-wide distribution of pamphlets prepared by a maternal and child health committee of the Indianapolis Medical Society. The Bureau felt that it would not be wise to distribute these pamphlets and made the following statement concerning them:

"1. Both of the pamphlets, a large quantity of which are already printed, according to information I have received, bear the endorsement of the Marion County Medical Society. The pamphlet entitled 'Motherhood' appears to be

a publication of that society. The large pamphlet is of more dubious standing. The text is that of an address at a meeting, sponsored by the Marion County Society, and the title page bears the legend, 'This pamphlet is sponsored by the Marion County Medical Society.' This fact, in my opinion, makes it extremely unwise to give these tracts state-wide distribution. Members of other county societies who might take exceptions to the text of the pamphlets or see some ulterior motive in their distribution would undoubtedly direct their resentment toward the Marion County Society. Already there is present in various parts of the state a feeling that the Indianapolis group presumes too much. Inasmuch as a demand for propaganda on this subject has not arisen from local communities over the state, I believe it would be wise for our bureau to withhold its approval of the proposed distribution of the pamphlets in question.

"2. I am advised that a movement is on foot for the revision of these pamphlets, under the direction of the new Bureau of Maternal and Child Health. It is to be expected that the new brochures will be free from the objection of carrying the name of any local medical society, and therefore suitable for state-wide distribution.

"3. Approval for the *local* distribution of the supply of pamphlets in question was withheld by the Council of the Marion County Medical Society. This fact, I believe, makes it inexpedient for our Bureau to approve their distribution *elsewhere*. The Council of the Marion County Medical Society made a very careful study of the question, and would probably be disturbed if we should reverse their opinion without consulting them."

(6) Cooperates with Local Committees. Within the last few years a public relations committee of the Marion County Medical Society was created and the Bureau of Publicity invited the chairman of that committee to sit in upon Bureau meetings on several occasions in order that he be informed concerning the problems faced by the Bureau and the general approach to these problems which come before the state committee as similar ones are presented from time to time before the public relations committee of the Indianapolis Medical Society. The chairman of all local public relations committees or local publicity committees are invited at any time to attend the Bureau meetings or refer any problems to the Bureau upon which the opinion of the Bureau may be desired.

VII. FINANCIAL STATEMENT OF THE BUREAU

The expenditures of the Bureau from August 1, 1936, to August 1, 1937, follow:

Clippings	$ 98.48
Postage	109.15
Stationery and mimeograph supplies	88.08
Printing	11.25
Traveling expenses	50.00
Miscellaneous	55.46
Total expense	$412.42

The Bureau was allowed by the Budget Committee $512.00 for the year 1937. Of this amount, the Bureau has spent $329.12 from January 1 to August 1, 1937, leaving a balance of $182.88 unexpended in the budget for the remainder of 1937.

VIII. CONCLUSION AND FINAL RECOMMENDATIONS OF THE BUREAU

In conclusion, during the past year the Bureau has made every attempt to coordinate the various activities of both lay agencies and health groups in order that all of these activities may be marked by sanity and not ballyhoo. The Bureau will continue to follow this policy and hopes thereby to be of lasting benefit to the profession and the public of Indiana.

Respectfully submitted,

WILLIAM N. WISHARD, M.D., *Chairman*,
E. VERNON HAHN, M.D.,
F. M. GASTINEAU, M.D.

REPORT OF THE COMMITTEE ON CIVIC AND INDUSTRIAL RELATIONS

House of Delegates,
Indiana State Medical Association

Gentlemen:

The activities of the Committee on Civic and Industrial Relations of the Indiana State Medical Association have been limited by reason of the few requests made to the committee, and the same comment is again found true as has been made previously, that the most frequent cause of the dissension is the failure of the attending physician to supply reports in detail, to-wit: To set out the exact nature and type of injury received; the same of the services rendered. Another cause is due to a misunderstanding as to what the compensation law comprises. One case in which the physician reported occupational dermatitis, at the time this controversy arose, the compensation law of Indiana did not cover occupational diseases. The representatives of the insurance carrier, basing their position on the report as rendered by the doctor, refused to pay for the treatment. This situation is now changed, as the present law covers occupational diseases that are the result of the employment. In view of the latter, it would behoove the physicians to investigate the terms of the law and be prepared to pass properly on just what is meant by "occupational disease" and what the term embraces. Some industries exist in which the nature of the employment does cause a disease peculiar to that type of employment, and if we understand the situation, it is under those circumstances that it becomes compensable.

Another case referred to the committee was one involving services rendered in a public liability case, and this case well demonstrates the lack of business acumen so often found in doctors. At the time they are obtaining their medical education, and later in their practice of that knowledge, their whole thought is directed toward the care of

the sick and injured, and in carrying out that procedure they often overlook the business side of their life's calling, with the result that after the final services are rendered and the time for reckoning comes, the person or persons who engaged the services, we might say rather nonchalantly deny any responsibility for the payment of such services. In this case the doctor was employed to examine the claimant for an insurance company. He made all the examinations necessary, which not only consumed time but required ability. He submitted the report to the local counsel for the insurance carrier, who refused payment for such services. The question was taken up with the insurance carrier by the local counsel, and they refused to pay the amount charged. The bill for $100, which in my opinion was quite reasonable, covered a complete physical examination, laboratory fees, x-ray of both feet and knee, and a trip to an adjoining county and services as a witness testifying as to the results of the examination. Incidentally, this insurance carrier, which we are pleased to report does not represent one of the better known companies, stated in its correspondence to its local counsel that "We have also consulted with our attorneys . . . and the Adjusters Bureau concerning the proper charges for services as outlined. . . " The chairman of your committee corresponded with the Indiana Casualty Adjusters Association and in reply the Casualty Adjusters Association stated, "Representatives of the ———— have never been members of the Association here in Indianapolis, and in taking it up with the membership it was definitely determined that this particular question was never referred to our group. By reason of the fact that the company is not represented in the Association, I think you will agree that there is nothing the Association can do on this particular disputed claim." We have here a situation where the insurance carrier was using tactics that were not based on facts. Such a situation can best be met by the physician making all arrangements as to the charge and the responsibility of the company before he makes the examination. This committee has had practically no such situation arise wherein the well-known larger companies were interested.

Further, we would like to quote from a communication from the Indiana Casualty Adjusters Association which will demonstrate that this organization is in accord with the practices of our own Association: "You may rest assured that whenever possible it is the Association's policy to further, in whatever way it can, the friendly relationship which exists and has existed between the medical association and our group."

Respectfully submitted,

A. F. Knoefel, M.D., *Chairman*,
W. C. Moore, M.D.,
F. J. McMichael, M.D.

REPORT OF COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

House of Delegates,
Indiana State Medical Association

Gentlemen:

Hospitals. Few states, perhaps only one other, have as difficult a hospital problem to face as has Indiana, because of the large number of small hospitals of fifty beds and under which almost prohibits the construction of additional, larger institutions. It is, however, to be hoped that in the future many of these small county units may give way to a few with one hundred fifty beds and over, for the construction and maintenance of which several adjacent counties will unite their efforts. The reasons for this have often been stressed. With the exception of those hospitals run by Catholic nursing orders, these small institutions cannot afford an administration, nursing, and laboratory staff sufficiently large to permit of a division of responsibilities sharp enough to insure the proper care of patients. This one point is of great importance. If one head nurse, aided by one or, at most, two full-time assistants, must be also resident superintendent, business manager, housekeeper, and at the same time responsible for the professional work, the hospital cannot be even a moderately safe institution for patients, since administrative duties, always immediate and conspicuous, generally take the right of way. The small patronage these hospitals are today receiving from their surrounding population so many of whom when ill go to large distant hospitals easily reached over good roads by the modern ambulance, should be convincing on this point.

One word may be added about laboratory work, a feature so important that often it either makes or breaks a hospital's reputation. It is impossible that even the best of trained technicians can be safely responsible for the wide variety of chemical, bacteriological, serological, and even roentgenological work ordered even in the smallest hospital. As a matter of fact, even in the best of large institutions, each technician is trained for one branch of this work only, and for the accuracy of her reports some physician who specializes in this field both holds himself responsible and also assists the patients' doctors in the clinical interpretation of her reports. Untrustworthy laboratory work and poor interpretation of the same is not only a useless expense but is positively misleading. It is suggested, therefore, that rather than attempt laboratories of their own, the smaller hospitals arrange with larger hospitals and private clinical laboratories to do as much as possible of this work for them. This could be done both by the large laboratory examining the specimens sent to it, and by the laboratory sending to the small hospitals either at regular intervals or on demand technicians to obtain blood cultures, take films, etc., the latter to be studied and interpreted at the center. The expense of this service should be borne

by, or through, the smaller units. One problem, which long ago became clear, is that far more laboratory and x-ray examinations are asked for than are needed, and that a smaller total mass of this work with more attention paid to the fewer examinations made would lead to far better diagnoses. Physical examination must emerge from its eclipse by the laboratory; the latter can never entirely replace the former. A case history well taken and physical examinations carefully made usually narrow the laboratory work actually necessary to a very small margin.

During the past few years, much has been written and said of state medicine, industrial medicine, health insurance medicine, etc., and undoubtedly all of these are very much "on their way." Movements toward general social betterment are inevitable, will be lasting, and are most desirable; and in each of them medical care occupies an almost central place and the local hospital is destined to play a more and more conspicuous part. Unfortunately in these movements the medical man seldom takes the lead that he should, but forces laymen to plan medical practice reforms while he silently stands on his dignity and waits to see how much it is likely to affect his personal fortunes. One point, however, which formerly was greatly feared, is becoming increasingly clear: patients always will demand the right to choose their own physicians. Any doubt there may have been on that point is settled by a letter from the President of the American Federation of Labor to a member of this committee (Dr. Moore).

Since in the pattern of medical practice of the future, whatever it turns out to be, the hospital is destined to be an ever-increasingly important center, each general practitioner should develop his contacts with, and accustom himself in the use of the hospital of his community, training himself to treat his patients in its wards with as great freedom of action and greater efficiency than he now does in their homes. This means that he should give this institution his personal interest and support, should concern himself that it comply with all the requirements of, and so be on the approved list of insurance companies and all boards directing the care of patient groups, whether industrial or indigent, and so may receive the sick for whose care these controlling agencies are to pay. He also should have a care that he personally be on the list of the visiting staff of this hospital eligible to treat the patients whom they send there.

To the laymen acquainted with this field, it is a mystery why the physicians on the hospital staffs, which should include all members of the county medical societies, do not themselves, aided by insurance companies, organize hospital group insurance. It certainly is coming anyway, they are the natural group to do this, and it would be better for the community, for the patients, and the physicians themselves, if physicians would control this movement.

Medical Education. It is well known to all state medical associations that new classifications of medical schools, which in some cases are likely to have far-reaching consequences, are being put into force by the Association of American Medical Colleges and the American Medical Association. We can only appeal to the members of the Indiana State Medical Association to lend to our university their full and hearty support that it may be enabled to conform to these regulations, whatever they may prove to be, and so preserve for the Indiana school the excellent position it long has maintained.

Respectfully submitted,

CHARLES P. EMERSON, M.D., *Chairman,*
ROBERT W. HARRIS, M.D.,
A. G. MOORE, M.D.

REPORT OF THE COMMITTEE ON PUBLIC RELATIONS

House of Delegates,
Indiana State Medical Association

Gentlemen:

Throughout the year your Public Relations Committee has been ready to take up any task which might be assigned to it by the Executive Committee, the Council, or the House of Delegates of the Indiana State Medical Association.

By tradition, this committee was formed to function in a very specific capacity. We stand ready to serve the official groups of this organization whenever we are called upon to do so.

Respectfully submitted,

W. P. GARSHWILER, M.D., *Chairman,*
JOHN H. GREEN, M.D.,
V. L. TURLEY, M.D.,
S. B. SIMS, M.D.,
J. B. ROGERS, M.D.,
F. E. HAGIE, M.D.,
L. T. RAWLES, M.D.

REPORT OF THE EDITOR OF THE JOURNAL

House of Delegates,
Indiana State Medical Association

Gentlemen:

THE JOURNAL is pleased to report progress during the period since our report of a year ago. We believe that we have prospered to a greater degree than at any time during the five years of the present set-up, not only in the matter of pages published (for which refer to the report of the Executive Committee) but in the quality of reading matter presented. In comparison with the more than fifty medical journals which are scanned each month, our magazine compares favorably with the best of them.

Our advertising pages have increased in number from year to year, and the financial picture is rather pleasing in that it contains no red ink.

Your editor expresses herewith his sense of obligation to the host of Indiana physicians whose contributions and whose advice have been so generously given. To the members of the Editorial Board, to the Managing Editor, and to the assistant to the editor, much credit is due, for without their help your editor feels that he would have failed to reflect in The Journal the traditions of Hoosier Medicine as they have been portrayed during the past year.

Again do we compliment the Council for its wisdom in creating an editorial board. For many years, the only justifiable criticism of The Journal was that it was too much of a one-man show. Under the present system, no one individual has control and, in addition, the work of the editor is subject to consideration and criticism at all times by a group whose interest in this publication is always first.

Whatever degree of success may have been attained by The Journal during the past year redounds to the credit of no one individual or group of individuals, but rather it is due to the almost perfect cooperation and the coordinated efforts of our membership at large. We trust that we may be pardoned in the observation that some of the credit for the unprecedented increase in our membership in 1937 is due to our magazine, for it is a fact that The Journal is widely read by the Indiana profession.

In conclusion, your editor again expresses appreciation for the magnificent support that the members have given in 1937, and reiterates assurance that your criticisms will be graciously received and welcomed.

E. M. Shanklin, M.D., *Editor.*

REPORT OF COMMITTEE ON NECROLOGY

House of Delegates,
Indiana State Medical Association.

Gentlemen:

The physician dies and is forgotten. His body returns to the earth that begot it, his soul to his Maker, and he is remembered no more by mankind. The services he gave to his fellows, the labor that tried his strength, the worry and anxiety that harrassed his spirit, the days of toil, the nights without sleep, the hours when he hungered and had not time to eat, the trips he forced his weary body to take, all these sacrifices, labors, worthy deeds—how soon they are forgotten!

One has but to search out the history of a small community and the story of the lives of its inhabitants to realize the insignificance of our lives amid the endless purpose of time. A hundred pennies is not much, but a hundred years suffices to obliterate the very names of men who have lived and labored hard and worthily for their fellows. The world accepts from us all we can give, and then we die and our loss makes scarcely a ripple upon the activities of life.

A physician goes into the homes of his patients in the days of their suffering and trouble, he goes with them down into the Valley of the Shadow of Death, he comes to them in the hour when they rejoice for their first born, and he leads them from pain and sickness to health. One would think he would be remembered by all, but he is not. A few hold his memory dear for the help he has given them, but to the many he becomes but a legend, remembered only for his oddities, his jokes, his sayings.

In starting to keep these records I am a bit handicapped as to just where to commence as many deaths are unreported in the medical journals for several months, so I have arbitrarily chosen to collect all those reported from August 1, 1936 to July 31, 1937, since the report for the previous year closed with the date of August 1, 1936. This means that some of these deaths occurred previous to August 1, 1936, but there will be some still unreported on August 1, 1937, to balance this. In this period I find 116 deaths reported, which is 27 more than the 89 reported last year.

The youngest of the list reported was Dr. Gilson Hild, of Indianapolis, who died December 29, 1936, of pulmonary embolism following an operation for appendicitis while he was serving his internship at the Methodist Hospital.

The oldest physician reported was Dr. Charles P. Bacon, of Evansville, who was ninety-nine years old at the time of his death.

Two Negro physicians are listed, Drs. R. W. Grubb, of Gary, and M. L. Williams, of East Chicago.

Five women physicians are found in this year's list: Bertha A. Clouse, Columbus; Eva A. Cropper, Indianapolis; Katherine A. Carey Ford, Van Buren; Marietta Haslep, Indianapolis; and Anna I. McKamy, New Albany. Of these, Doctors Ford and Haslep served as medical missionaries in China for several years.

There were fifteen deaths in both February and March, eleven in June, ten in January, April and May, nine in October, eight in August and September, seven in July and December and six in November.

Two died in the 20's; two in the 30's; three in the 40's; eighteen in the 50's; thirty-five in the 60's; thirty in the 70's; twenty-two in the 80's and four in the 90's. Seven died at 65, six at 64, 69 and 82, and five at 85, and one each died at 90, 91, 93, and 99 years.

Thirty were graduates of the Medical College of Indiana and the Indiana University School of Medicine; eight graduated from the Kentucky School of Medicine and eight from the Medical College of Ohio; six from Rush Medical College; five each from the University of Michigan Medical School, the University of Louisville School of Medicine and the Fort Wayne College of Medicine; four were from the Eclectic Medical College; three each from the University of Pennsylvania

School of Medicine, the University of Illinois College of Medicine, and the Louisville Medical College; two each from the North Western University Medical School, Hospital College of Medicine of Louisville, Meharry Medical College, Starling Medical College, Central College of Physicians and Surgeons of Indianapolis, Miami Medical College, Toledo Medical College, and North Western University Woman's Medical School; one each from St. Louis University School of Medicine, Yale University School of Medicine, Curtis Physio-Medical College, Jefferson Medical College, New York University Medical College, Baylor University College of Medicine, Pulte Medical College, Cincinnati College of Medicine and Surgery, College of Physicians and Surgeons of Keokuk, University of Nashville Medical Department, Kansas Medical College, Trinity Medical College, Ohio Medical College, Beaumont Hospital Medical College, Bennett College of Eclectic Medicine and Surgery and Hahneman Medical College and Hospital.

Sixty-one of these men were members of their county and state society, five were honorary members; fifty were non-members; thirty-five belonged to the A. M. A., and sixteen were Fellows of the A. M. A.; twelve were past presidents of their County Society; one was past president of the Indiana State Medical Association; one was past vice-president of the State Association; one was a past member of the House of Delegates of the A. M. A.; fourteen had served as city or county health officers, and one had been statistician for the State Board of Health for years; four were bankers and three of these were bank presidents; two had served in the Spanish - American War, and seventeen served in the World War, and one of the latter attained the rank of major; one man had served with the Canadian forces in the World War; two had been medical missionaries; fifteen held staff appointments in the various hospitals of the state; five had held the office of county coroner; five had been at some time professors in colleges; one was a medical director of a C. C. C. Camp; one was a member of the Indiana State Industrial Board; one had served for years as city school physician; many had served on the school boards of their home towns; one had been physician to the Indiana Boys' School and one had been physician to the Michigan City Prison; one was county medical society secretary; one had been both state representative and state senator; two had owned hospitals; two were F. A. C. S. and one F. A. C. P.; one was a lawyer and one held a degree in engineering; one was vice-president, secretary and director of an insurance company and one was a chemist.

The diseases listed as operating in the causes of death are reported as follows:

As usual diseases of the heart account for the most deaths. They were listed as heart disease, 8; heart block, 1; mitral insufficiency, 1; angina pectoris, 3; coronary thrombosis, 5; coronary embolism, 1; coronary occlusion, 6; coronary sclerosis, 4; acute dilatation, 2; myocarditis, 11; hypertensive heart disease, 2; and arterio-sclerotic heart, 1; making a total of 45. To these add cardio-renal-vascular diseases, 4.

Cancer took 10 lives, classified as liver, 1; sigmoid, 1; transverse colon, 1; throat, 1; bladder, 1; and prostate, 5. Auto accidents took 7, while the motorcycle took 1. Pneumonias, all types, took 15 lives. Arteriosclerosis was found 11 times; cerebral hemorrhage, 7; diabetes mellitus, 6; nephritis, all types, 9, and uremia, 4.

Fractures of the hip occurred 4 times and of the humerus once, while osteomyelitis was listed once also. Appendicitis was listed 2 times, influenza 4 times, prostatic obstruction and tuberculosis 2 times each.

The following were listed one each: acute yellow atrophy of the liver, cirrhosis of the liver, acute gastritis, gastric ulcer with hemorrhage, ulcerative colitis, gastro-enteritis, ischiorectal abscess, meningitis, paralysis agitans, hysteria, multiple sclerosis, sclerosis of the cord, lateral sclerosis, benign tumor of the prostate, prostatic abscess, chronic cystitis, pulmonary edema, pulmonary embolism, cerebral edema, cerebral embolism, obliterative endarteritis, phlebitis, senility and septicemia.

Respectfully submitted,
JAMES B. MAPLE, M.D., *Chairman.*

REPORT OF COMMITTEE ON GRADUATE EDUCATION

House of Delegates,
Indiana State Medical Association

Gentlemen:

The recently concluded session of the annual Post-Graduate Course given conjointly by the Indiana University School of Medicine and the Indiana State Medical Association was one of the most successful meetings for postgraduate work which these two organizations have given. This is further attested by the numbers attending the session and by the quality of the material presented. The attendance this year, exclusive of medical students, nurses and non-professional guests, was the largest in the history of the Course. Running through the week of May 10th to 14th, many out-of-town speakers provided interesting supplementary clinics and lectures to the regular work given by the members of the faculty.

An innovation this year consisted in the panel discussions. These groups were composed entirely of physicians throughout the state who led the discussion which was actively participated in by members of the audience.

Another feature was the final address given on May 14th by Dr. Maude Slye for the public as well as for the medical profession.

The Alumni night was marked by addresses by Dr. N. J. Eastman, professor of obstetrics, Johns Hopkins University School of Medicine, and Dr. Frank C. Mann of the Mayo Clinic. Dr. S. A. Levine and Dr. Elliott C. Cutler of Harvard University School of Medicine, Dr. Vernon C. David of Chicago and Dr. H. N. Cole of Cleveland completed the list of out-of-town speakers on other nights.

On the first morning the meeting was held conjointly with the Indiana State Pediatricians' Society.

Daily sessions of the Postgraduate Course were held at the Indiana University Medical Center and evening sessions at the Lincoln Hotel.

The Bureau of Maternal and Child Welfare of the Indiana State Board of Health cooperated with the Postgraduate Committee and in certain instances helped to defray the expenses of out-of-town speakers who lectured on subjects pertaining to maternal and child health. This Bureau is further aiding the Postgraduate Committee in providing speakers on this subject for district medical meetings.

It is hoped that an even more successful meeting may be held next year.

Respectfully submitted,

L. A. Ensminger, M.D., *Chairman*
C. J. Clark, M.D.
John Owen, M.D.
J. K. Berman, M.D.
L. H. Segar, M.D.
W. N. Wishard, Jr., M.D.

REPORT OF THE COMMITTEE ON STUDY OF HEALTH INSURANCE

House of Delegates,
Indiana State Medical Association

Gentlemen:

The Committee reports a lull in the public efforts of recognized proponents of socialized medicine. The adherents are unquestionably only awaiting more propitious times. The senior senator from New York (Wagner) in his Indianapolis address in May at the National Conference on Social Work distinctly set forth intention to introduce further social methods looking to medical care of the population, stating that it was hoped to have the cooperation of the profession. It was an expression of need of cooperation but distinctly carried the impression of doing without it if necessary.

The Committee has refrained from active presentation of probable results of the institution of state medicine, feeling that if excessive propaganda were used, when and if actual need or organized resistance occurs, the subject might have lost its true importance through over-discussion.

A constant state-wide correspondence has been maintained, seeking to establish multiple centers through which public opinion might be reached in an unobstrusive but constant campaign of education, carried on by many medical men of prestige, in the course of their daily activities. A generous and probably effective support has been given and it is the intention to widen and intensify the movement during the fall.

The experiment of socialized medicine in Western Canada in which the scheme had to be abandoned because of the solidly organized profession's unwillingness to work the plan, suggests a powerful weapon available to us. Having a deep belief in the probability of such measures being actively instituted in this country, it is the Committee's opinion that much stress should be placed on thorough organization of the profession, seeking to lessen the number of those available to carry out such a scheme if disapproved by the organized profession. The Committee, to all of its correspondents, has laid much weight on the necessity of close organization so that the policies determined by the constituted leaders might be strongly and promptly supported by the profession acting as a cohesive body.

The Committee feels that an effective way of maintaining the prestige and popular confidence in the profession is actively to control and administer local agencies and projects involving medical matters and, as county or city societies, to support and carry out policies of the state which aim at betterment of general health conditions, and by so doing increase our deserved reputation of being always concerned in the welfare of the people we serve.

The condition of the profession in other countries working under socialized medicine are either static or less favorable. In the countries controlled by dictators, conditions are uniformly bad but they are no worse than those governing other professions. In others, notably France, the regulations are frequently changing, and with each change the medical men have more duties, less privilege of conduct, and less compensation. The British have so far failed in their persistent efforts to modify the irksome conditions heretofore imposed.

The Committee suggests continuation of:

(1) Active personal propaganda in opposition to socialized medicine, without publicity;

(2) Continued intensive enlisting of medical men in organized medicine;

(3) Prompt and adequate support of the recommendations made by the constituted authority of medicine.

Respectfully submitted,

W. U. Kennedy, M.D., *Chairman.*
J. M. Fleming, M.D.
H. M. Senseny, M.D.
C. E. Gillespie, M.D.
R. H. Beeson, M.D.
W. H. Miller, M.D.

REPORT OF THE COMMITTEE ON VETERANS' AFFAIRS

House of Delegates,
Indiana State Medical Association

Gentlemen:

The Committee on Veterans' Affairs has no report to make as nothing has come before this committee, nor been brought to its attention:

Whether or not the committee should be continued will be a matter for the incoming president to decide.

Respectfully submitted,

C. C. BASSETT, M.D., *Chairman,*
M. F. DAUBENHEYER, M.D.,
C. C. CRAMPTON, M.D.,
PAUL S. JOHNSON, M.D.,
JAMES A. WORK, M.D.

COMMITTEE ON STUDY OF HIGH SCHOOL ATHLETICS

(No report received.)

REPORT OF THE STATE FAIR COMMITTEE

House of Delegates,
Indiana State Medical Association

Gentlemen:

The 1936 State Fair Exhibit of the Indiana State Medical Association and the American Medical Association was held in the west Indiana State Board of Health building, together with exhibits sponsored by the Indiana Tuberculosis Association, the Indiana Nurses' Association, the Indiana School of Pharmacy, the Indiana Hospital Association and the Indiana Dentists Association.



The exhibit loaned by the A. M. A.

Through the cooperation of the Bureau of Exhibits of the American Medical Association, a series of models of famous scientists was shown, together with a description of the work for which they were renowned. Three files dealing with antiseptics and patent medicines were much read and discussed by the visitors. Electrically lighted cabinets showing various health slogans were installed.

The department of cardiology of the Indiana University School of Medicine conducted about 1,350 examinations to determine the activity of the thyroid gland. These were done by means an electrical device which has been under test in the school for several years, and it has been found to check rather closely with the usual basal metabolism tests although the examination requires but a few moments and may be done without special preparation of the patient.

A member of the State Fair Committee was on duty each day to answer questions and assist in the metabolism tests which were done by G. A. Peters and Harry Baum.

Through the courtesy of the Indiana University School of Nursing, a nurse was present to distribute literature and to assist in the tests.

Charts were shown and literature distributed by the Tuberculosis Association.

An exhibit based on the life of Florence Nightingale was shown by the Nurses Association.

Pharmaceutical equipment and crude drugs were shown by the Indianapolis School of Pharmacy.

A completely equipped two-bed hospital room was shown by the Hospital Association.

The Dentists Association conducted a puppet show, giving instruction on the care of the teeth.

Respectfully submitted,

RUSSELL SAGE, M. D., *Chairman.*
JOSEPH W. GIBBS, M. D.
C. A. REID, M. D.
J. E. FERRELL, M. D.
C. H. JINKS, M. D.
WILLIAM A. SHUCK, M. D.
WILLIAM M. DUGAN, M. D.
THURMAN B. RICE, M.D.

REPORT OF THE COMMITTEE ON MENTAL HEALTH

House of Delegates,
Indiana State Medical Association

Gentlemen:

The Committee on Mental Health of the Indiana State Medical Association begs to submit the following report for the year 1936-1937.

In January of 1937 this committee was requested to investigate certain newspaper articles regarding the operation of psychological clinics by the department of Psychology of Indiana University. This matter was thoroughly investigated by correspondence and personal interviews with various officials of the University, and at a meeting of this committee in June 1937 final reports and recommendations were made. A complete record of correspondence, findings and recommendations is on file in the headquarters office.

At this same meeting the question of the psychological clinics in connection with Butler University

was brought up. It was learned that such clinics had been abandoned or rather had never materialized, and no investigation was made.

Dr. Howard Mettel, representing the Bureau of Maternal and Child Health of the State Division of Public Health, attended this meeting and asked the committee's approval of the employment by his department of an expert psychiatrist. He presented a tentative though detailed outline of the duties to be performed by this branch of his department. With assurance that all activities will be under medical control and extended only to the indigent, approval of this plan was given by the committee.

In this connection it may be stated that there is a constant demand by the public for psychiatric, child guidance and other types of mental hygiene clinics. We are quite aware of the need for such clinics, but insist that they always be under medical supervision and available to the indigent only. Various plans for such clinics have been discussed, but no definite conclusions have been reached. A proposition is now under way which may prove effective, though it will require liberal appropriations and considerable time to materialize. The details will be considered in a later committee meeting.

Under date of July 13, 1937, this committee was requested to investigate the work done by the Mental Hygiene Department of the Indiana University School of Medicine. This investigation is under way, but it is being slowed up on account of the absence of the head of the Department of Neuropsychiatry.

During the the past year there have been no major changes in the administration or personnel of our state or municipal institutions for the care of the mentally ill. All are still overcrowded.

As reported last year, no provisions have been made in local county hospitals for the care of the acute mental cases while awaiting commitment to the state institutions, thus necessitating their incarceration in the county jails.

This committee feels that the education and training of medical students and nurses in neuropsychiatry is satisfactory and adequate.

Your Committee on Mental Health is always at your service and ready to investigate or study any problem referred to it.

Respectfully submitted,

Larue D. Carter, M.D., *Chairman*
A. M. De Armond, M.D.
Max Bahr, M.D.
John H. Hare, M.D.
L. P. Harshman, M.D.
C. L. Williams, M.D.

REPORT OF COMMITTEE ON PREVENTION OF TRAFFIC ACCIDENTS

House of Delegates,
Indiana State Medical Association

Gentlemen:

Traffic accidents resulting in loss of life and serious injury continue to increase in spite of an aroused public interest and effort to reduce accidents.

The present methods of control appear to have but little effect on the death rate as shown by published statistics.

All responsible authorities agree that reckless speed is a major factor in fatal accidents. It appears that this cannot be controlled either by education or enforcement of speed laws, and can only be done by Federal laws prohibiting the manufacture of powerful, high speed motors, which laws will make speed above an acceptable and safe rate impossible. Such a law has been introduced into Congress and four members of your State Association committee favor the passage of it or some similar law.

Respectfully submitted,

Murray N. Hadley, M.D., *Chairman*
V. K. Harvey, M.D.
Mark M. Piper, M.D.*
J. R. Porter, M.D.
C. F. Overpeck, M.D.
G. V. Cring, M.D.

**Not Voting.*

REPORT OF STATE DIVISION OF PUBLIC HEALTH LIAISON COMMITTEE TO DEAL WITH SOCIAL SECURITY ACT

House of Delegates,
Indiana State Medical Association

Gentlemen:

This committee has met each time when called by the Department of Public Health.

We have followed carefully the program as proposed by the Director, Dr. H. B. Mettel. These programs have been fully discussed and we have had full cooperation throughout the year.

This committee has accepted and passed unanimously the various points, the details of which may be seen in the annual report of the Bureau of Maternal and Child Health of the Indiana State Board of Health.

This committee has arranged a sub-committee to study puerperal mortality in Indiana.

Respectfully submitted,

E. O. Asher, M.D., *Chairman*
J. C. Carter, M.D.
R. W. Shanks, M.D.

COMMITTEE ON OLD AGE DEPENDENCY

(No report received.)

REPORT OF THE COMMITTEE ON SECRETARIES' CONFERENCE

House of Delegates,
Indiana State Medical Association

Gentlemen:

Because of the flood in the southern part of the state this year, the Secretaries' Conference was postponed from the last of January to the 21st of March, 1937. There were about 200 in attendance at this meeting which was held at the Columbia Club in Indianapolis.

Dr. Charles Gordon Heyd, President of the A. M. A., was the after-dinner speaker. Mr. M. E. Hays, Regional Cooperative Specialist for the Resettlement Administration was a speaker in the afternoon. He also spoke in place of Dr. R. G Williams, National Director of the Resettlement Administration, who was unable to be present. Drs. J. B. Maple, V. K. Harvey, E. M. Shanklin, Norman Beatty, H. W. Shaw and Mr. Albert Stump put on a very interesting program. Dr. Neal Matlock was unable to be present.

Dr. W. T. Lawson, of Danville, was an honor guest.

The question was brought up whether the secretaries should meet with the Northwest Conference at Chicago next year. Many said "yes," but after the meeting several protested against doing this.

Respectfully submitted,

A. M. MITCHELL, M.D., *Chairman*
S. C. DARROCH, M.D.
R. L. HANE, M.D.
P. E. YUNKER, M.D.
W. R. TINDALL, M.D.
B. M. TAYLOR, M.D.

REPORT OF COMMITTEE ON SYPHILIS CONTROL

House of Delegates,
Indiana State Medical Association

Gentlemen:

In a program which has as its goal the elimination of syphilis, two agencies must necessarily work in a spirit of cooperation. These two agencies are the Medical Association and the Department of Health, which includes the State Board of Health and its subdivisions or the health provinces under its supervision.

Publicity and propaganda dissemination should be entirely directed through the health department. This, however, should be done with the entire approval of the state and local medical associations. No doctor, as an individual, can conduct his own publicity. However, a health department can do this without stigma to the medical association or to its individual members.

Second, the health department and county medical society can be of infinite aid to the general practitioner in the ferreting out and diagnosing of cases of syphilis. It is easy to see that ample laboratory facilities will be necessary.

Third, the health department may exercise its police power in effecting treatment in the office of the private practitioner. From the viewpoint of the general practitioner, treatment should always be conducted in his office. If the patient is able to pay for treatment, he should do so. If he is unable to pay, then the state board of health should supply the drugs to the physician. (The supplying of drugs for indigent cases has already been taken care of by the state.) By this method a doctor does not lose direct contact with his own patient and the patient himself will enjoy the care of a man who has given due consideration to his case. If indigent practice in a community becomes so heavy that it is no longer feasible to handle it privately, then a well established clinic may take over the indigent cases. As many as possible of these clinic directors should be full-time men. The relationship between the medical society and this man will be one of accord under such an arrangement.

Publicity Campaign

Since publicity is the essence of salesmanship, it is the opinion of this committee that a very large state-wide committee be appointed. This committee should consist of a physician duly appointed by each medical society in the state of Indiana. It should also consist of every health officer in the state. In addition to this committee, which shall be known as the "state-wide committee," sub-committees shall be appointed by the state committee members. These sub-committees shall function in the communities in which they exist. It would be well to have in the membership of these sub-committees heads of hospitals, heads of nursing associations, social service workers, such as the head of the Community Fund, Boy Scouts, Girl Scouts, young Hebrew Association, the Y. W. C. A., Y. M. C. A., Catholic lay organizations, etc. The larger each committee becomes, the greater will be its salesmanship ability in the community. These committees would be able to carry out the plans advocated by the state-wide committee.

Since publicity should be in the hands of the health department, it would be the duty of the state board of health to call the large state-wide committee into session and outline to them the definite plans which have been worked out by the medical association, through its committee for the control of syphilis, and the State Board of Health. The state committee can place in the hands of the sub-committees valuable information to be distributed in their communities. Through the agency of the state committee members (doctor and health officer) in the community, public meetings can be held with the sub-committee as a nucleus of attendance. Films, exhibits in the

nature of poster displays, etc., can be obtained from the state board of health.

A large state-wide committee and sub-committees in the different communities as defined above could be instrumental in spreading much information throughout the state.

Points to Be Considered

1. That a definite system of reporting cases be worked out.
2. That investigators be appointed for certain health provinces or groups of health provinces, to aid the physician in seeing that his patient continues treatment until his case is dismissable as cured or permanently arrested.
3. That the general medical profession and the boards of health be informed that syphilis is a quarantinable disease, and that people afflicted with the disease refusing treatment be quarantined.
4. That cards be printed by the state board of health for the use of physicians to report delinquencies in treatment.
5. That upon receipt of a card from a physician stating that a patient is delinquent, it shall be the duty of the health officer or his duly authorized deputy to visit the patient and insist upon his or her treatment or quarantine.
6. That a method of quarantine be made available for people who are infectious or are delinquent in their treatment.
7. That hospital beds be provided for patients needing hospitalization.
8. That the practice of supplying drugs for indigent patients be continued by the State Board of Health through the attending physician.
9. That a full-time physician be employed by the state board of health to be in charge of venereal disease educational work.
10. That the Wassermann card be changed at the state board of health laboratory, omitting the indigent clause, leaving it up to the doctor as to whether or not his patient can afford to pay, and that all positive serological tests be reported to the state board of health.
11. Recommended that the state board of health make a survey of darkfield equipment for use in the state and recommended that lectures be given by representative members of the medical association to the students at Purdue and other pharmaceutical schools, setting out our viewpoint on venereal disease.
12. Recommended that the medical association contact the Retail Druggists Association, urging members not to treat venereal disease, but to refer all such cases to physicians.

Respectfully submitted,

F. R. Nicholas Carter, M.D.,
Chairman,
Minor W. Miller, M.D.,
Ernest O. Nay, M.D.

REPORT OF THE AUDITING COMMITTEE

House of Delegates,
Indiana State Medical Association

Gentlemen:

Your committee met at the Indiana National Bank in Indianapolis on August 3, 1937, and examined the following investments held by the Indiana State Medical Association:

General Fund:

Ft. Wayne, Indiana, School Improvement bonds	$ 3,000.00
Marion County, Indiana, Flood Prevention bonds	3,000.00
Indianapolis City Hospital bonds	5,000.00
United States Treasury bonds	10,000.00
Beachton Court Apartments, Chicago—bonds evidenced by certificates of deposit	4,000.00
Rokeby Apartment Hotel, Chicago—bond evidenced by certificate of deposit	980.00
	$25,980.00

Medical Defense Fund:

Ft. Wayne, Indiana, School Improvement bonds	$ 2,000.00
Marion County, Indiana Flood Prevention bonds	2,000.00
Indianapolis City Hospital bond	1,000.00
United States Treasury bonds	5,000.00
	$10,000.00
Total investments	$35,980.00

The treasurer reported that upon the maturity of two Lake County State Highway Aid bonds in the amount of $2,000 on January 1, 1937, at the direction of the Executive Committee this $2,000 along with an additional $3,000, was invested in United States Treasury Certificates. This additional investment increases the Association's holdings by $3,000 over this time last year.

Your committee also examined the cash balances in the Indiana National Bank, The American National Bank, The Fletcher Trust Company, and The Bankers Trust Company, as shown by the check books, and all of these accounts were found to be in accord with the bank statements as of July 31, 1937. These accounts consist of the general headquarters office fund, the medical defense fund, the Journal fund, and the petty cash fund respectively.

Respectfully submitted,

O. B. Norman, M.D., *Chairman*
W. F. Hughes, M.D.
E. B. Rinker, M.D.

REPORT OF HISTORIAN

(No report received.)

DELEGATES TO THE INDIANA STATE MEDICAL ASSOCIATION

FRENCH LICK SPRINGS
OCTOBER 4, 5, AND 6, 1937

Delegates	*Alternates*
Adams	
Allen	
M. R. Lohman, Ft. Wayne	Donald W. Schafer, Ft. Wayne
Wm. C. Wright, Ft. Wayne	E. R. Carlo, Ft. Wayne
M. B. Catlett, Ft. Wayne	Eugene L. Bulson, Ft. Wayne
Bartholomew	
A. M. Kirkpatrick, Columbus	J. K. Hawes, Columbus
Benton	
V. L. Turley, Fowler	D. E. Mavity, Fowler
Boone	
C. G. Kern, Lebanon	John R. Porter, Lebanon
Carroll	
C. C. Crampton, Delphi	G. D. Beamer, Delphi
Cass	
B. W. Egan, Logansport	
Clark	
Clay	
John C. Shattuck, Brazil	J. F. Maurer, Brazil
Clinton	
M. F. Boulden, Frankfort	C. A. Robison, Frankfort
Crawford	
Daviess-Martin	
S. L. McPherson, Washington	I. E. Bowman, Odon
Dearborn-Ohio	
J. M. Pfeifer, Lawrenceburg	C. W. Olcott, Aurora
Decatur	
W. C. Callaghan, Greensburg	
DeKalb	
M. E. Klingler, Garrett	W. W. Swarts, Auburn
Delaware-Blackford	
T. R. Owens, Muncie	C. L. Bock, Muncie
Dubois	
H. C. Knapp, Huntingburg	A. H. Held, Huntingburg
Elkhart	
A. C. Yoder, Goshen	W. A. Price, Nappanee
Fayette-Franklin	
R. S. Sappenfield, Brookville	H. N. Smith, Brookville
Floyd	
P. H. Schoen, New Albany	C. E. Briscoe, New Albany
Fountain-Warren	
J. C. Freed, Attica	A. L. Ratcliff, Kingman
Fulton	
Gibson	
Carl M. Clark, Oakland City	O. T. Brazelton, Princeton
Grant	
L. D. Holliday, Fairmount	R. W. Lavengood, Marion
Greene	
King L. Hull, Bloomfield	George E. Moses, Worthington
Hamilton	
C. M. Donahue, Carmel	J. W. Griffith, Sheridan
Hancock	
Jesse E. Ferrell, Fortville	Robert E. Kinneman, Greenfield
Harrison	
W. E. Amy, Corydon	F. M. Applegate, Corydon
Hendricks	
O. T. Scamahorn, Pittsboro	J. H. Grimes, Danville
Henry	
Walter M. Stout, Newcastle	Robert A. Smith, Newcastle
Howard	
W. J. Marshall, Kokomo	D. W. Paris, Kokomo
Huntington	
Fred Grayston, Huntington	R. G. Johnston, Huntington
Jackson	
H. P. Graessle, Seymour	L. H. Osterman, Seymour
Jasper-Newton	
M. D. Gwin, Rennselaer	C. D. Larrison, Morocco
Jay	
John Lansford, Redkey	J. E. Nixon, Portland
Jefferson	
S. A. Whitsitt, Madison	Wm. A. Shuck, Madison
Jennings	
D. W. Matthews, North Vernon	J. H. Green, North Vernon
Johnson	
W. L. Portteus, Franklin	O. A. Province, Franklin
Knox	
E. W. Beckes, Vincennes	J. F. Reilly, Vincennes
Kosciusko	
H. F. Steele, Claypool	C. E. Thomas, Leesburg
LaGrange	
W. O. Hildebrand, Topeka	J. M. Kercheval, Wolcottville
Lake	
W. H. Howard, Hammond	R. A. Elliott, Gary
J. R. Pugh, Hammond	F. A. Malmstone, Griffith
T. W. Oberlin, Hammond	C. M. Jones, Whiting
E. L. Schaible, Gary	A. J. Lauer, Whiting
LaPorte	
Jon Kelly, LaPorte	H. A. Briggs, Michigan City
Lawrence	
C. B. Emery, Bedford	L. H. Allen, Bedford
Madison	
C. V. Rozelle, Anderson	Ross Tracy, Anderson
Marion	
E. O. Asher, New Augusta	J. W. Wright, Indianapolis
H. G. Morgan, Indianapolis	C. O. McCormick, Indianapolis
Max Bahr, Indianapolis	Walter F. Kelly, Indianapolis
O. H. Bakemeier, Indianapolis	Lyman R. Pearson, Indianapolis
Foster Hudson, Indianapolis	H. L. Foreman, Indianapolis
C. H. McCaskey, Indianapolis	R. H. Moser, Indianapolis
Ralph Lochry, Indianapolis	E. R. Smith, Indianapolis
O. W. Sicks, Indianapolis	William E. Gabe, Indianapolis
Frank Gastineau, Indianapolis	T. J. Dugan, Indianapolis
Walter Morton, Indianapolis	H. B. Mettel, Indianapolis
L. L. Shuler, Indianapolis	
Marshall	
T. C. Eley, Plymouth	
Miami	
S. D. Malouf, Peru	O. R. Lynch, Peru
Monroe	
Wm. C. Reed, Bloomington	Ben Ross, Bloomington
Montgomery	
T. Z. Ball, Crawfordsville	George A. Collett, Crawfordsville
Morgan	
H. H. Dutton, Martinsville	M. C. Pitkin, Martinsville
Noble	
C. E. Munk, Kendallville	F. W. Black, Ligonier
Orange	
George Dillinger, French Lick	Ivan Clark, Paoli
Owen	
Boaz Yocum, Coal City	M. S. Brown, Spencer
Parke-Vermillion	
F. G. Greene, Bloomingdale	
Perry	
E. R. Snyder, Troy	F. C. Glenn, Tell City
Pike	
T. R. Rice, Petersburg	A. R. Logan, Petersburg
Porter	
Charles H. DeWitt, Valparaiso	A. J. Van Winkle, Valparaiso
Posey	
Pulaski	
Putnam	
Clyde Gray, Cloverdale	G. D. Rhea, Greencastle
Randolph	
Fred McK. Ruby, Union City	J. W. Wallace, Lynn

Ripley

George S. Row, Osgood — J. F. Carney, Batesville

Rush

Robert Spindler, Milroy — Donald I. Dean, Rushville

St. Joseph

Edw. Blackburn, South Bend — Geo. Rosenheimer, South Bend
A. S. Giordano, South Bend — Alfred Ellison, South Bend
M. D. Wygant, Mishawaka — K. T. Knode, South Bend

Scott

Marvin McClain, Scottsburg

Shelby

B. G. Keeney, Shelbyville — M. M. Wells, Fairland

Spencer

J. C. Glackman, Rockport — Eva Buxton, Rockport

Starke

Albert Fisher, North Judson — J. D. Denaut, Knox

Steuben

L. L. Eberhart, Angola — S. S. Frazier, Angola

Sullivan

J. T. Oliphant, Farmersburg — J. H. Crowder, Sullivan

Switzerland

George W. Copeland, Vevay — L. H. Bear, Vevay

Tippecanoe

Earl Van Reed, Lafayette — O. L. McCay, Romney
Gordon A. Thomas, Lafayette — R. R. Calvert, Lafayette

Tipton

H. B. Shoup, Sharpsville — E. B. Moser, Windfall

Vanderburgh

Minor Miller, Evansville — Herbert Dieckman, Evansville
L. E. Fritsch, Evansville — B. D. Ravdin, Evansville

Vigo

O. R. Spigler, Terre Haute — E. O. Nay, Terre Haute
R. G. Harkness, Terre Haute — A. W. Cavins, Terre Haute

Wabash

James L. Walker, LaFontaine — James G. Kidd, Roann

Warrick

Clyde J. Munns, Newburgh — Charles Martin, Boonville

Washington

Claude B. Paynter, Salem — William Green, Pekin

Wayne-Union

Will Thompson, Liberty — F. E. Hagie, Richmond

Wells

Max M. Gitlin, Bluffton — Allen C. Nickel, Bluffton

White

Whitley

P. A. Garber, South Whitley — O. F. Lehmberg, Columbia City

LIST OF PRESIDENTS OF THE INDIANA STATE MEDICAL ASSOCIATION SINCE ITS ORGANIZATION

Name and Residence	*Elected*	*Served*
*Livingston Dunlap, Indianapolis	1849	1849
*William T. S. Cornett, Versailles	1849	1850
*Asahel Clapp, New Albany	1850	1851
*George W. Mears, Indianapolis	1851	1852
*Jeremiah H. Brower, Lawrenceburg	1852	1853
*Elizur H. Deming, Lafayette	1853	1854
*Madison J. Bray, Evansville	1854	1855
*William Lomax, Marion	1855	1856
*Daniel Meeker, LaPorte	1856	1857
*Talbott Bullard, Indianapolis	1857	1858
*Nathan Johnson, Cambridge City	1858	1859
*David Hutchinson, Mooresville	1859	1860
*Benjamin S. Woodworth, Fort Wayne	1860	1861
*Theophilus Parvin, Indianapolis	1861	1862
*James F. Hibberd, Richmond	1862	1863
*John Sloan, New Albany	1863	1864
*John Moffett (acting), Rushville	1864	1864
*Samuel M. Linton, Columbus	1864	1864
*Myron H. Harding, Lawrenceburg	1865	1865
*Wilson Lockhart, (acting) Danville	1865	1866
*Vierling Kersey, Richmond	1866	1867
*John S. Bobbs, Indianapolis	1867	1868
*Nathaniel Field, Jeffersonville	1868	1869
*George Sutton, Aurora	1869	1870
*Robert M. Todd, Indianapolis	1870	1871
*Henry P. Ayres, Fort Wayne	1871	1872
*Joel Pennington, Milton	1872	1873
*Isaac Casselbery, Evansville	1873	1874
*Wilson Hobbs, Knightstown	1873	1874
*Richard E. Haughton, Richmond	1874	1875
*John H. Helm, Peru	1875	1876
*Samuel S. Boyd, Dublin	1876	1877
*Luther D. Waterman, Indianapolis	1877	1878
*Louis Humphreys, South Bend	1878	——
*Benj. Newland (acting) Bedford (v.-p.)	1878	1879
*Jacob R. Weist, Richmond	1879	1880
*Thomas B. Harvey, Indianapolis	1880	1881
*Marshall Sexton, Rushville	1881	1882
*William H. Bell, Logansport	1882	1883
*Samuel E. Munford, Princeton	1883	1884
*James H. Woodburn, Indianapolis	1884	1885
*James S. Gregg, Fort Wayne	1885	1886
*General W. H. Kemper, Muncie	1886	1887
*Samuel H. Charlton, Seymour	1887	1888
*William H. Wishard, Indianapolis	1888	1889
*James D. Gatch, Lawrenceburg	1889	1890
*Gonsolvo C. Smythe, Greencastle	1890	1891
*Edwin Walker, Evansville	1891	1892
*George F. Beasley, Lafayette	1892	1893
*Charles A. Daugherty, South Bend	1893	1894
*Elijah S. Elder, Indianapolis	1894	1895
Charles S. Bond, (acting), Richmond	1894	1895
*Miles F. Porter, Fort Wayne	1895	1896
*James H. Ford, Wabash	1896	1897
William N. Wishard, Indianapolis	1897	1898
John C. Sexton, Rushville	1898	1899
*Walker Schell, Terre Haute	1899	1900
*George W. McCaskey, Fort Wayne	1900	1901
*Alembert W. Brayton, Indianapolis	1901	1902
John B. Berteling, South Bend	1902	1903
*Jonas Stewart, Anderson	1903	1904
*George T. MacCoy, Columbus	1904	1905
*George H. Grant, Richmond	1905	1906
*George J. Cook, Indianapolis	1906	1907
*David C. Peyton, Jeffersonville	1907	1908
*George D. Kahlo, French Lick	1908	1909
*Thomas C. Kennedy, Shelbyville	1909	1910
*Frederic C. Heath, Indianapolis	1910	1911
*William F. Howat, Hammond	1911	1912
*A. C. Kimberlin, Indianapolis	1912	1913
*John P. Salb, Jasper	1913	1914
*Frank B. Wynn, Indianapolis	1914	1915
*George F. Keiper, Lafayette	1915	1916
*John H. Oliver, Indianapolis	1916	1917
Joseph Rilus Eastman, Indianapolis	1917	1918
William H. Stemm, North Vernon	1918	1919
Charles H. McCully, Logansport	1919	1920
*David Ross, Indianapolis	1920	1921
William R. Davidson, Evansville	1921	1922
*Charles H. Good, Huntington	1922	1923
*Samuel E. Earp, Indianapolis	1923	1924
E. M. Shanklin, Hammond	1924	1925
C. N. Combs, Terre Haute	1925	1926
Frank W. Cregor, Indianapolis	1926	1927
George R. Daniels, Marion	1926	1928
Charles E. Gillespie, Seymour	1927	1929
Angus C. McDonald, Warsaw	1928	1930
Alois B. Graham, Indianapolis	1929	1931
Franklin Smith Crockett, Lafayette	1930	1932
Joseph H. Weinstein, Terre Haute	1931	1933
Everett E. Padgett, Indianapolis	1932	1934
*Walter J. Leach, New Albany	1933	1935
Roscoe L. Sensenich, South Bend	1934	1936
Edmund Dougan Clark, Indianapolis	1935	1937

*Deceased.

DATA REGARDING PREVIOUS ANNUAL SESSIONS

Year	*Annual Session*	*Place*	*Attendance*
1908	59th	French Lick	312
1909	60th	Terre Haute	421
1910	61st	Fort Wayne	450
1911	62nd	Indianapolis	748
1912	63rd	Indianapolis	590
1913	64th	West Baden	312
1914	65th	Lafayette	527
1915	66th	Indianapolis	646
1916	67th	Fort Wayne	381
1917	68th	Evansville	270
1918	69th	Indianapolis	388
1919	70th	Indianapolis	
1920	71st	South Bend	421
1921	72nd	Indianapolis	550
1922	73rd	Muncie	522
1923	74th	Terre Haute	823
1924	75th	Indianapolis	1,012
1925	76th	Marion	800
1926	77th	West Baden	900
1927	78th	Indianapolis	1,500
1928	79th	Gary	892
1929	80th	Evansville	814
1930	81st	Fort Wayne	1,115
1931	82nd	Indianapolis	1,033
1932	83rd	Michigan City	904
1933	84th	French Lick	637
1934	85th	Indianapolis	1,814
1935	86th	Gary	1,011
1936	87th	South Bend	1,150

EXHIBITORS 1937 SESSION

1. Mellin's Food Company, Boston, Massachusetts.
5. Brooks Denhard Surgical Instrument Co., Louisville, Ky.
8. Akron Surgical House., Inc., Indianapolis
9. White-Haines Optical Co., Columbus, Ohio.
11-12 H. J. Heinz Company, Pittsburgh, Pa.
13. H. G. Fischer and Co., Chicago, Ill.
14. The Jones Surgical Supply Co., Cleveland, O.
15. A. S. Aloe Company, St. Louis, Mo.
16. Philip Morris & Co., New York City.
17. The Medical Protective Co., Wheaton, Ill.
18. E. R. Squibb and Sons, New York City.
19. Middlewest Instrument Co., Chicago, Ill.
20. Mead Johnson & Co., Evansville, Ind.
21. Stokely Brothers and Co., Indianapolis.
22. Lederle Laboratories, Inc., New York City.
23. Horlick's Malted Milk Corp., Racine, Wis.
24-25. U. S. Standard Products Co., Woodworth, Wis.
26. Gerber Products Co., Fremont, Mich.
27. Petrolagar Laboratories, Inc., Chicago, Ill.
28. W. B. Saunders Co., Philadelphia, Pa.
29-30-31. Pitman-Moore Co., Indianapolis.

BOOTH NUMBER 1
MELLIN'S FOOD COMPANY
Boston

The proportion of maltose and dextrins in Mellin's Food, the protein and mineral content and the favorable effect of Mellin's Food on the digestibility of milk are distinctions that commend Mellin's Food as a modifier of milk for the feeding of infants and for the preparation of nourishment for adults requiring a restricted diet. Physicians are invited to call at our Booth No. 1 to discuss their feeding problems.

BOOTH NUMBER 8
AKRON SURGICAL HOUSE
Indianapolis

The Akron Surgical House, Inc., will exhibit in Booth No. 8. Samples of W. D. Allison, Enochs, Hamilton and American Metal furniture will be shown. Also, Bard-Parker instruments will be featured.

The booth will be in charge of T. W. Marshall, assisted by Stanley Novotny.

BOOTH NUMBER 9
WHITE-HAINES OPTICAL COMPANY
Columbus and Indianapolis

The exhibit of the White-Haines Optical Company, distributors of Bausch & Lomb Ophthalmic Supplies, with offices in the Hume-Mansur Building, Indianapolis, will feature the latest developments of optical science. Lenses to be featured are the Panoptik Bifocal (including the improved cataract lens), and the Orthogon Soft-Lite lens that provides glare protection with wide vision correction. Among other Blue Ribbon Ophthalmic Supplies will be the Loxit mounting—rimless glasses without screws to come loose. There will be a display of Bausch & Lomb instruments, including the Clason Visual Acuity Meter, the Binocular Ophthalmoscope, the Slit Lamp, and the popular Greens' Refractor. Also to be displayed is the instrument that has aroused so much interest throughout the country—the Wottring Rotoscope that simplifies the whole procedure of Orthoptic Training. The Rotoscope is being used with excellent success by opthalmologists, hospitals, and clinics. The White-Haines exhibit will be in charge of E. F. Wildermuth, general sales manager from Columbus, Ohio, with Don Rowles and Jack Shreffler in attendance.

BOOTHS 11 AND 12
H. J. HEINZ COMPANY
Pittsburgh, Pa.

H. J. Heinz Company, makers of the 57 Varieties, invites you to visit their new exhibit featuring strained foods, breakfast cereals, tomato juice and olive oil.

Stop for a cold drink of Heinz Tomato Juice and register for the fourth edition of the Nutritional Chart. The previous editions were so enthusiastically received that it was thought advisable to make frequent revisions in order to keep abreast with the rapid advances in the field of nutrition.

BOOTH NUMBER 13
H. G. FISCHER & COMPANY
Chicago

The latest Fischer model of short wave, x-ray and other apparatus, to be exhibited and demonstrated by H. G. Fischer & Company, will interest physicians because of their many unique features of design and performance. The complete Fischer line includes shock-proof x-ray apparatus, short wave units, combination cabinets, galvanic generators, ultra violet and infra-red lamps, tissue-cutting and other units, accessories and supplies. Fischer apparatus has been recognized as highest quality for more than 25 years. Physicians, attending the convention, are invited to ask for demonstrations of models in which they are interested or to consult with Fischer representatives regarding technics made available by Fischer apparatus.

Attendants at the booth will be Messrs. Tyler, Barbour and Bover.

BOOTH NUMBER 14
JONES SURGICAL SUPPLY CO.
Cleveland,

Jones Surgical Supply Company will exhibit standard furniture, Alpine lamps, standard forms of pharmaceuticals and supplies, and surgical instruments.

Mr. L. G. Voorhees will be in charge, and will have two Indiana representatives on the floor: namely Dr. C. A. McCormick of the South Bend territory, and Mr. J. D. Archer of the Fort Wayne territory. Mr. E. W. Jones, president of the company, also will attend the convention.

BOOTH NUMBER 15
A. S. ALOE COMPANY
St. Louis, Mo.

A. S. Aloe Company, in space No. 15, will display a general line of surgical instruments and equipment for the physician and hospital. The new Aloe Short Wave Diatherm, the Elliott Treatment-Regulator, the new De Bakey Blood Transfusion Instrument and other specialties will be featured.

Mr. Curtis and Mr. Oldfather, Aloe representatives, will supply those interested with brochures on Aloe Steeline, the most modern creation in physicians fine treatment room furniture.

BOOTH NUMBER 16
PHILIP MORRIS & CO., LTD.
New York City

Philip Morris & Co. Ltd. will demonstrate the method by which it was found that Philip Morris cigarettes, in which diethylene glycol is used as the hygroscopic agent, are less irritating than ordinary cigarettes in which glycerine is employed.

BOOTH NUMBER 17
THE MEDICAL PROTECTIVE CO.
Wheaton, Ill.

The Medical Protective Company is represented at booth No. 17 where you are invited to call. Medical Protective Service is an institution of the medical profession whose legal liability problems we have concentrated upon for 38 years. Bring your professional liability questions and problems to booth No. 17. Our representative is at your service to present our protection plan, to explain the peculiar relation of the doctor to the law which governs your practice or to discuss any particular phase of professional liability in which you are especially interested.

The exhibit will be in charge of Mr. Joseph P. Sanford and Mr. Joseph D. O'Meara.

BOOTH NUMBER 18
E. R. SQUIBB AND SONS
New York

Physicians attending the Indiana State Medical Association meeting are cordially invited to visit the Squibb exhibit in booth No. 18.

The complete line of Squibb Vitamin, Glandular, Arsenical and Biological Products and specialties, as well as a number of interesting new items will be featured.

Well informed Squibb representatves will be on hand to welcome you and to furnish any information desired on the products displayed.

BOOTH NUMBER 19
MIDDLEWEST INSTRUMENT COMPANY
Chicago

The Jones Metabolism Equipment Company in booth 19 will feature as their display the Jones MOTOR BASAL metabolism apparatus.

A special feature of this unit is that it contains no water and requires no calculation in the determination of the basal metabolic rate.

BOOTH NUMBER 20
MEAD JOHNSON & COMPANY
Evansville

Mead Johnson & Company at booth No. 20 are distributing this year an unusually fine souvenir item. It is not only beautiful but extraordinary because it contains no advertising. Ask for your copy of "Parergon."

The complete display of Mead products includes two new ones.

Mr. P. G. Bicknell and Mr. A. P. Twineham will be in attendance at the meeting.

BOOTH NUMBER 22
LEDERLE LABORATORIES
NEW YORK

The Lederle Laboratories, Inc., will exhibit a complete assortment of their biological and specialty pharmaceutical products in space No. 22, and will feature particularly Specific Type Antipneumococcic Sera, Neufeld Type Determination Sera, Refined and Concentrated Solution Liver Extract in 1 c.c vials, and complete line of vitamin products of high concentration. Will also display packages and literature of practically all products manufactured.

Our representatives who will attend this meeting are E. V. Scott, H. J. Carwin and F. J. Caverly.

BOOTH NUMBER 23
HORLICK'S MALTED MILK CORPORATION
Racine, Wisconsin

You are cordially invited to visit the Horlick's Malted Milk Corporation Exhibit in booth No. 23. Your attention is drawn to the special advantages of Horlick's Malted Milk as a nutritious, easily digested food-drink, often acceptable when no other food can be tolerated. Its special value will be pointed out:

1. For infant feeding.
2. For growing children.
3. For nursing mothers.
4. For the undernourished.
5. For the sick, especially in fever and ulcer diets.
6. For the convalescent.
7. In sleeplessness.

Representatives: Dr. G. A. Glasgow and Mr. D. E. Cain.

BOOTHS 24 AND 25
U. S. STANDARD PRODUCTS COMPANY
Woodworth, Wis.

United States Standard Products Company has been manufacturing biologicals for the past 18 years. It requires highly trained technicians to properly prepare these products. The same technicians prepare our ampuls and glandular products, under the supervision of the heads of these departments, who are trained specialists in their work. This assures the medical profession of products of superior quality. You can use U. S. S. P. Co. products with confidence.

BOOTH NUMBER 26
GERBER PRODUCTS COMPANY
Fremont, Mich.

Gerber Products Company is showing two new foods for infant and therapeutic diet use, Strained Apricot-Apple Sause and Strained Liver Soup with Vegetables, in addition to the complete line of strained baby foods this company has produced for many years.

Two types of literature, one for distribution to patients and one for professional use, will be supplied by mail to all who register at this booth.

BOOTH NUMBER 27
PETROLAGAR LABORATORIES, INC.
Chicago

Physicians are cordially invited to visit the new convention display (booth No. 27) where Petrolagar Laboratories, Inc., will be represented by Messrs. H. L. Shelton and R. C. Allen. Scientific drawings and literature on the subject of constipation will be available in addition to samples of the five types of Petrolagar.

Petrolagar is an emulsion of pure mineral oil (65% by volume) and agar-agar, accepted by the Council on Pharmacy and Chemistry of the American Medical Association for the specialized treatment of constipation.

BOOTH NUMBER 28
W. B. SAUNDERS COMPANY
Philadelphia

These publishers will exhibit a complete line of their books. Of particular interest will be the following new works: Warbasse-Smyth's 3-volume "Surgical Treatment," Tuft's "Clinical Allergy," Jackson's "Diseases of the Larynx," The Medical Clinics of North America, The Surgical Clinics of North America, the new edition of Cecil's "Medicine," the new edition of Bastedo's "Materia Medica, Pharmacology and Therapeutics," Beren's "Diseases of the Eye," Major's "Physical Diagnosis," Mason's "Preoperative and Postoperatitve Treatment." In addition, there will be shown such standard works as Bickham's 7-volume "Operative Surgery," Curtis' 3-volume "Obstetrics and Gynecology," Wolf's "Endocrinology," Christopher's "Textbook of Surgery" and his "Minor Surgery," Beckmans "Treatment," and many others.

BOOTHS 29, 30 AND 31
PITMAN-MOORE COMPANY
Indianapolis

The Pitman-Moore exhibit this year strikes an entirely new note. It consists of a series of electrically-lighted show windows built of wood having a patented finish which gives it the appearance of having been salvaged from some old cathedral. In the center of the facade a continuously operated motion picture tells the story of the prevention of rabies in animals and man, including the manufacture of rabies vaccine. F. V. Hawkins, secretary, and J. L. Rogers, salesmanager of the company will be in charge. The exhibit is in spaces 29, 30 and 31.

ATTENTION!

A special effort has been made this year by the Scientific Exhibit Committee to have the best scientific pictures available at French Lick. A special arrangement has been made for continuous pictures in three rooms from the first day through the last day of the meeting. The committee and the officers of the Association hope that all physicians will check the pictures in which they are most interested and make a special effort to see them. A repeating schedule has been arranged so that the hours for showing the pictures may be worked in on each individual's convention schedule. See pages 456 and 457.

The Scientific Exhibit Committee particularly wishes to thank the Indiana State Board of Health, Davis and Geck, Inc., Petrolagar Laboratories, Inc., Mead Johnson and Company, and Lederle Laboratories, Inc., for their help and cooperation in arranging this program.

All of the pictures shown by the Indiana State Board of Health will be available to local county medical societies throughout the year. Write to the Bureau of Maternal and Child Health for them.

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SEPTEMBER, 1937

EDITORIALS

OUR PRESIDENT

On November 28, 1869, a youngster was born at a home in Economy, Indiana, who later was to play a mighty important role in the medical affairs of Indiana—Edmund D. Clark. As the years came and went, "Ed" Clark attended the grade and high schools in his community, and spent two years at Earlham College in Richmond. Born of Quaker stock, it was to be expected that his early scholastic training would be in schools of that denomination.

Dr. Clark graduated in 1891 from Bellevue Hospital Medical College, returning to his Hoosier home town to practice for a year, then he went to the wide open spaces in Wyoming and Idaho. Recently the writer had the pleasure of "listening in" on a chat between Dr. Clark and Dr. Earl Whedon, of Sheridan, Wyoming, each telling of the days "way back when" in that state. After two years of a range-riding practice, Dr. Clark entered Johns Hopkins to do postgraduate work, and spent two years in the surgical service of that great teacher, Halstead. His medical education was completed with several months of study in Vienna, Breslau, and Berlin.

Dr. Clark began his surgical practice in Indianapolis in 1896 and for more than forty years he has been an acknowledged leader in his field. Since 1897 he has served as professor of one or more of the divisions of surgery in what is now the Indiana University Medical School, and for many years he has served as secretary of the faculty. He was a member of the committee of eight appointed to perfect the organization of the present Indiana University School of Medicine.

Early in 1917, Dr. Clark enlisted in the medical service of the United States Army, was mustered in as a major, and sailed for France early in November of 1917. In France he was made medical commandant of base hospital number 32, and was elevated to the rank of lieutenant-colonel. Dr. Clark remained in command of the unit until his return to the United States in 1919, and he was given the rank of colonel in the Medical Reserve Corps which he holds at the present time. For his valorous services in the World War, Dr. Clark has been cited by the French government and also has the distinction of having a personal citation from General Pershing.

Dr. Clark served as president of the Indianapolis Medical Society in 1931 and holds membership in numerous special surgical societies.

In 1893, Dr. Clark was married to Harriet L. Lewis, and they have one daughter, now Mrs. Arnold M. Talbott. Dr. Clark is inordinately proud of his two grandchildren.

Such is the biographical record of our president, but of the man himself, of Ed Clark as we know him and have known him since before the turn of the century when we entered medical school in our Capital City, much remains to be said. "Ed" Clark he was in those days, and "Ed" Clark he remains to this day. Competent, no end, in his chosen profession, a fighter for the right as he sees it, endowed with a forcefulness and honesty of expression which establishes his opinions upon the firm basis of clear thinking, Dr. Clark has gained a host of friends such as seldom fall to the lot of one individual. As a teacher he has made an enviable record; as a surgeon of unusual ability, he has won a high place in Indiana medicine; as the representative head of the medical profession in Indiana during 1937, he has set a mark that his successors may find difficult to maintain. During one of the most strenuous periods in the history of medicine in Indiana, Dr. Clark has "come through" in an admirable manner, and it is with a sense of personal pleasure and personal privilege that we record these facts about Edmund D. Clark—Our President.

CREEPING DEATH

Along the trail of tragedy and disaster which all of us must travel, there inevitably comes a time when the stark reality of our helplessness to handle a situation leaves us with a bitter sensibility of our limitations. A short time ago it was not difficult to visualize the alarming and increasing misery caused by unemployment, the failure of banks with their avalanche of distress, the clogging of the wheels of industry, the futility of private endeavor, and the widespread gathering of gloom and despair. Material things, perhaps, but in the life of a nation they are of grave consequence and peril. The solution of such problems, however, has not been without hope and, in a measure, realization.

In our daily contact with the ills of mankind we have often approached a situation where all of our efforts have been to no avail and, recognizing the "Grim Adversary" as the ultimate victor, we have accepted defeat. Often, however, we have successfully parried his clutching maw and saved the victim of many a dread malady. In doing so we have become perhaps a little calloused. Our daily contact with life and death has left us a little hardened to the emotions which underlie each and every serious illness. And yet when the shadow of death hovers over someone close to us, it is then that we shed our cloak of professional callosity and experience the emotions of helpless loss.

So much progress has been made in medical science that today we are able to present an acceptable challenge to most of the diseases to which man falls heir. Among the unconquered diseases there is one which still remains an enigma, and perhaps because of its insidious and stealthily progressive character we are apt too easily to accept defeat when its true nature becomes apparent. Subacute bacterial endocarditis is one of the enemies of human longevity for which no adequate weapon has been found. Attacking, as it does, those individuals already handicapped by a pre-existing organic heart lesion, it subtly spreads its tentacles to destroy, inch by inch, what was once a fine, sturdy human being.

It is difficult to credit its designation to any one man. Jaccoud as early as 1882 recorded prolonged cases of endocarditis, and Osler in 1885 added to our conception of its nature. Schottmuller, in 1910, described it as endocarditis lenta, and the disease has since been frequently referred to by his name. It has undoubtedly existed from the earliest of times, and its recognition now is readily established by any alert interne.

The symptomatology embraces the situation of a vigorous young individual of an average age of twenty-five to forty-five years, with a history of previous rheumatic heart disease, who has been singularly free from recurrent attacks of rheumatism, and who at length becomes conscious of a progressive lassitude, and perhaps discovers that along toward evening, in addition to marked weariness, there is a slight elevation in temperature. Preliminary investigation of the condition fails to reveal a great deal beyond the presence of the pre-existing heart lesion, usually a mitral and aortic insufficiency, perhaps some generalized aching or grippe-like symptoms, and the slight elevation in temperature. In the early stages the condition is often considered to be influenza or rheumatism, and perhaps typhoid, and tuberculosis may be given some thought. With the general malaise and weakness, headaches, backaches and variously distributed indefinite pains, sometimes sudden in their manifestations, such considerations do not hold up. The blood picture reveals a very moderate leukocytosis and perhaps no change in the red corpuscle count. The urine at this stage is usually negative, and various agglutination tests are likewise negative. The search for various foci of infection may well prove unproductive. The blood pressure is little altered from a normal reading, and the general physical findings are essentially negative with the exception of the old heart lesion. However, the majority of these cases will reveal a persistent blood culture of streptococcus viridans—not always typical in its growth characteristics, but ultimately identified. With this finding, and the history outlined, the condition can no longer disguise itself. Then begins the slow torture of witnessing a human body disintegrate before your eyes—day by day—inch by inch—gradually, silently, stealthily the disease consumes and destroys.

In spite of the fact that any treatment is known to be ineffective and that the outcome is inevitable death in an average of from five to six months, something must be done to try to stay the advance of this parasitic malady. Resort to rest in bed and general supportive and symptomatic measures are of course utilized. Our useless and futile measures then may be legion. Autogenous or stock vaccines and sera produce no effect. The immunization of animals or humans with the specific organism of the victim, and the use of their sera or blood have been wholly ineffectual. Blood transfusions do not allay the disease, although they are of some help in prolonging life by benefiting the anemic state as it develops. Autoserotherapy offers no relief. The use of leukocytic extract has been discarded. The preparation of a bacteriophage is extremely difficult for this organism, because of the unsatisfactory lytic results, but even if obtained and used does not affect the course of the disease. Chemotherapy has advanced many substances for use orally, subcutaneously or intravenously. To mention them, only to acknowledge their futility, one may resort to quinine, hexamethylenamine, salicylates, iodides, optochin, isoamylhydrocuprein, various preparations of silver, mercury, arsenic, the aniline dyes, mercurochrome, acriflavine, gentian violet, and perhaps many others. Because of the recent interest in sufanilamide it has already had considerable trial in this affliction. At this time one can rather definitely place it in the useless category, whether it is given by mouth, subcutaneously, intramuscularly or intravenously.

Various physical measures have also proved unavailing. X-ray therapy over the heart, ultraviolet radiations and fever therapy have met with no success. Surgical procedures such as cauterization of a large area over the left breast only add to the misery of the patient. Such novel procedures as deliberately infecting the patient with ratbite fever or malaria, the intravenous use of typhoid vaccine, the production of sterile turpentine abscesses, and the use of various foreign proteins have been tried and quickly discarded.

While our knowledge of the pathology and diagnosis of the disease may be extensive, our treat-

ment except for hygienic and nursing care and symptomatic measures is useless. Gradually the patient loses weight, the appetite fails, the weakness becomes more pronounced, the temperature seeks a higher level and becomes more constant, sweating is profuse and chills may enter the picture to further exhaust the patient. Petechiae begin to appear, small scattered hemorrhagic areas in the skin or mucous membranes, increasing in number and distribution as the condition advances. When these embolic phenomena involve the fingers and toes they give rise to painful reddened nodules, named after Osler's description as Osler's nodes. Even before the appearance of these manifestations red blood corpuscles may be found in the urine indicating embolic processes in the kidneys. Soon also the spleen becomes palpable due to the same condition. A progressing anemia slowly saps the patient's resistance. Small retinal hemorrhages or sudden blindness may complicate the condition. Embolic aneurysms may develop and cerebral embolism is not infrequent. In fact the progress of the disease is marked by a pathway of emboli involving any or many organs.

Relentlessly the disease creeps on, each day sapping a little of the patient's strength, any moment likely to strike a fatal blow—toying with its victim—agonizing the relatives and friends, not content until the last dregs of perverse, malevolent ruthlessness are satisfied. Death comes as a welcome escape in the form of cerebral emboli, uremia, progressive inanition and anemia, intercurrent infections or perhaps hemorrhage from a ruptured mycotic aneurysm.

In the zenith of human destiny a great star is shining. It dims and brightens but never dies. It sheds its rays upon mankind and its light surrounds the world with a halo of life and strength. Its rich effulgence illumines the present and tints the dim mists of the future with a golden hue. It is the eternal star of Hope. Bathed in the gentle rays of this guiding light may the spirit that has won so much for medical science lead us on to the conquest of this creeping death.

COLOR AND COURAGE

Disturbing to any intelligent person are the findings contained in the recently published study of a typical midwestern community entitled "Middletown in Transition," by Robert S. and Helen Merrell Lynd. Middletown is generally known to be Muncie, Indiana. Figures, facts and conclusions in regard to political, social, educational, professional and business conditions and life will shock, stun and sting any reader, for if some of the things are true in Middletown, they must also be true in almost any Indiana or, for that matter, American community.

Of all the charges of narrowness, materialism, hypocrisy and even sordidness with which the Lynds reproach us, none is more upsetting to layman and physician alike than the following conclusion carried in small type as a footnote in this thick volume:

"A point worth noting is the loss of intellectual leadership and independence of Middletown's doctors and lawyers. Some of Middletown's most ruggedly independent thinkers in 1890 were the local doctors, judges, and lawyers. These men less often speak their minds, they become to a greater extent intellectually colorless and are sticking to their last, making money like the rest of Middletown's business men."

Maybe we can laugh off most criticisms, but this is one that strikes deep into the heart of every doctor. You may say that a doctor is a fraud, is cracked, you may even say that he is a quack, but never call him colorless! We do not believe that the Lynds are correct, but *if* the doctors of Indiana are losing their intellectual leadership, their independence of thought and expression—their "color"—all hope is gone, not only for the profession but for Indiana.

Endowed with a formal education and background far beyond that available to any other group in the community, experienced by daily intimate contacts with their fellow men as are no other individuals, the members of the medical profession are expected to have a conception of things, an analytical power, an outspoken and independent viewpoint that gives warmth, expression, humor, philosophy and "color" to their communities. The physician more than any other one should have a decisive influence in the life, the thinking and the daily habits of the people.

"Middletown" must never lose the grand tradition of its Kempers, Boles, Trents, and Cowans. The Indiana profession must never backslide from the fearlessness and courage of its Olivers, Porters, Daughertys, Walkers, Wishards, Eastmans and Bulsons—men who told their world what they thought, and their world listened and molded its actions accordingly.

THE PORTABLE ELECTRO-CARDIOGRAPH

Physicians in general practice rapidly are becoming more acquainted with the importance of heart tracings. The usefulness of electrocardiography will become more available to a greater number of patients when the family physician appreciates its importance in diagnosis and treatment. It should no longer be looked upon as an instrument wholly for the use of the cardiologist.

There are many forms of heart disease in which the electrocardiogram gives little or no helpful information. There are other conditions of the heart in which the heart tracings lead directly to and may be the only method of making a correct

diagnosis. This is especially true of coronary disease of the painless type, or pain which can be misinterpreted, and sometimes of low grade fever and sweats of unknown origin.

The family physician sees the greatest percentage of heart disease, and his interpretation of symptoms and the subsequent treatment employed very frequently give the patient his only chance of recovery. We know that only about twenty-five per cent of cases of coronary occlusion are immediately fatal. The mortality of the other seventy-five per cent depends to a degree upon the clear understanding of the existing pathology and proper treatment. The physician's responsibility of making a correct diagnosis in coronary occlusion is no less than it is in acute appendicitis. The condition may be less known to the family but the physician can not escape his duty by calling it acute indigestion or "a heart attack."

These patients are confined to their beds, or should be, and they should be visited frequently in their homes. Hospitalization is not always possible or desirable. The excitement and physical disturbance of moving such patients to a hospital often is the deciding factor against them and their removal to the hospital usually is for the convenience of the family and the physician.

Treatment can be helped materially by the aid of the electrocardiograms, but the patient should not be moved each time a tracing is made. Portable machines are now available and reliable. Their tracings are as accurate as those of the larger machines. The portable electrocardiograph is not heavy (its weight is about twenty-five pounds), it is not large, and it can easily be carried in the physician's automobile. Electrical attachments in the home are unnecessary. The "hook-up" to the patient is identical to that of the larger non-portable machines.

If a portable electrocardiograph is helpful to the consultant (many heart specialists carry portable electrocardiographs in their cars at all times), it should be even more helpful to the family physician. The time required to make a tracing is only a few minutes and the expense is negligible. The information obtained may be life saving and in any event it helps the physician to determine the true status of a condition in which facts are very important and usually are very difficult to obtain.

FRENCH LICK IS AN IDEAL VACATION SPOT. COMBINE ANNUAL CONVENTION AND VACATION AT FRENCH LICK OCTOBER 4, 5, and 6.

(See Page 440)

EDITORIAL NOTES

It is to be hoped that steps are being taken to avoid the interminable delays usually noted in the first meeting of the House of Delegates. From one to two hours of time usually is lost in getting the House organized, all of which would be unnecessary if definite plans of activity were laid in advance of the first meeting.

Pierce MacKenzie waxes enthusiastic about that Evansville golf champion. He opines that the French Lick golf tournament means but another cup for his buddy. However, golf rapidly is coming into its own in Indiana and physicians all over the State have been making new records this summer; so it may be that the coming convention will give us a new champ. At any rate, Pierce's challenge will not go unnoticed and he may have to write a different sort of story after the convention.

While advance hotel registrations at French Lick are unusually heavy, many of our folk who expect to attend this convention have not attended to that matter. A record attendance is predicted, for it seems that everyone with whom we come in contact is all set to go. Better be sure that your quarters will be awaiting you. Again we say that the Cumberland foothills are at their best in early October; weather conditions are certain to be perfect, and a program seldom equalled in our long history awaits you—so, let's go!

An Indiana sanitarium reputedly offering physicians twenty-five dollars for each patient referred to it was quizzed on the subject by the Executive Committee. The reply was to the effect that it is true that such compensation is offered, that the sanitarium owner feels that such compensation is due the physician for his "trouble." Our committee correctly holds that such an arrangement amounts to nothing more nor less than fee splitting, and has so advised the sanitarium proprietor.

The August number of the *Journal of the Iowa State Medical Society* carries an article on "Graduate Education for Practicing Physicians," by our

own R. L. Sensenich. This is a subject on which Dr. Sensenich has deep-rooted opinions, a subject that he has written about and talked about for several years past. There is no question but that postgraduate education is a prime necessity, one that must be brought to the physician in many instances. The ideas advanced by Dr. Sensenich are well organized and have met with general approval in most medical circles.

Disciples of Izaak Walton who chose the opening of the fishing season for their trips to the north woods were generally disappointed because in northern Michigan, Wisconsin, Minnesota and Canada, the season was from ten days to two weeks late. Our experience in the Lake-of-the-Woods fishing country was proof of that fact, for the larger muskies and the bass of unusual size were on the spawning beds and refused all attempts to bring them to the lure. Dame Nature seemed to be a bit late this year in donning her spring garb, a fact that was noted also in efforts at flower-growing, for the season seemed to be ten days to three weeks later than usual.

Medical literature continues to refer to what is termed a lack of the teaching of therapeutics in our medical schools, despite the fact that the schools insist that their courses on this subject are up-to-the-minute. Occasional visits to the drug department of a modern drug store will disclose a complete absence of the long rows of tinctures and fluid extracts; gone are the bottles and boxes of roots, barks, leaves, etc. In their places we find the proprietary remedies, known only to physicians today, but tomorrow they will be handed over the counter to casual purchasers. The recent graduate seems to know little of pharmocology, and many of the useful drugs are strangers to him.

While you are at French Lick, make a special effort to arise in time for an early morning stroll. Walk back into the woods in the rear of the Japanese gardens and take with you a bag of nuts. Stop for a little visit with Pluto, then drop a few of the nuts about you. Soon you will be visited by dozens of squirrels, some of which will be a bit timid and jittery, but some of the bolder ones will come up and eat from your hand. Many of the birds will be there at the time of our convention, and especially do we hope that the cardinals will remain until that time. An hour spent in the woods at French Lick is worth two to three hours of lying in bed of mornings.

The annual reports of all officers and committees are published in this number of The Journal and we recommend that every member read them carefully. These reports, all carefully prepared, present a cross section of Indiana medicine during the past year. For some years past we have studied the annual reports published in other state medical journals, and long ago we came to the conclusion that the Indiana profession is about the livest of them all. Especially should the members of the House of Delegates give careful attention to these reports since the House must take action on all of them and a working knowledge of what it is all about will save much time in the proceedings of the House of Delegates.

For many years it has been customary in the management of open wounds incurred in street accidents to use tetanus antitoxin as a preventive measure. From time to time we have heard the comment that since the passing of the horse as a means of city transportation, this precaution is less necessary. However, Eric C. Gilles,[1] of Baltimore, makes clear the fact that street dust is an excellent harbor of tetanus germs. In an illuminating article on the subject, he concludes with the observation that "Clostridium tetani is widely distributed in street dust even at the present day," and the preventive measure so long in use should be continued.

The editorial, "Creeping Death," in this issue of The Journal, was written by a physician who for some months past had attended a fellow practitioner who was doomed because of an infection of this particular type. In sending it in, he remarked that he hoped we would not consider it as a bit of sentimentality, though he had been hard hit over the case; rather it was written to stress the fact that in spite of our many successes in combating disease, there remain some ailments over which man can exercise no control. We have licked tuberculosis, we have conquered cancer in many thousands of instances, yet there remain a few diseases which, try as we may, we cannot defeat, and in the end we lose the battle.

This number of The Journal carries complete committee reports and we commend them to our readers. A vast fund of information is contained in these reports. The average member has little

[1] Gilles, Eric C.: Isolation of Tetanus Bacilli from Street Dust. *J. A. M. A.*, 109:484:7 (Aug. 14) 1937.

conception of the enormous amount of labor expended each year in furthering the interests of Hoosier Medicine, and even a casual perusal of these reports will serve to enlighten the reader. Holman Taylor, dynamic secretary-editor of the State Medical Association of Texas, devotes considerable space in the August issue of the Texas journal to a consideration of what each official and each committee does during the year. It is a very informative statement, and we hope that at some future time we may be able to make a similar presentation of what goes on in Indiana State Medical Association circles.

It is unusual that an article on any medical subject is not out-dated within a few years. However, an article written in 1910 by Matthew D. Mann, M.D., of Buffalo, New York, on "Dividing Professional Fees," is so well done that it is quite as applicable today as it was twenty-seven years ago. The article should have been published in booklet form and given the widest distribution. It is not too late to distribute such a booklet now, and perhaps our Executive Committee will look favorably upon the idea. Fee splitting, termed "dichotomy" by many who practice it, is one of the great banes of the medical profession. Nearly all county, state and national organizations have "resoluted" against it, but it remains an ever-present evil and one that must be dealt with in no uncertain manner ere long. Its defenders never have been able to give one plausible excuse for the practice.

The National Cancer Institute is an actuality since Congress recently has enacted a law bringing it into being and has appropriated a considerable sum for its present activities. Just what the set-up will be, just how the whole thing will be managed and under what supervision it will be operated are, of course, matters of conjecture at the present time. Further, the question as to just how much need there is for Federal participation in the cancer problem remains another question. What with several endowments already in the field of research, we are inclined to believe that it might have been a bit better for the Federal government to cooperate with these than to set out along another line.

However, we are pleased to note that the Federal government has become cancer conscious, and trust that such activities as they may undertake will be of the cooperative sort.

An editorial in the August number of the *Wisconsin Medical Journal* entitled "His Own Garden" directs timely attention to a very important fact, namely, that "it is not too late for the general practitioner to recover that neglected phase of his practice which he has allowed public health officials to take away from him." There is much of merit in the observations of this writer. He makes plain the fact that public health agencies have taken over much of our work because we did not attend to it. For example, he mentions the immunization program, now very generally conducted by various health agencies. If we had properly and promptly taken over that work, we would have remained in control of the situation. The writer points out that the family physician, the doctor who brings the child into the world, is the one who should look after preventive measures in guarding the health of the growing child.

The subject of vacations is one of especial interest to physicians if we may judge from comments in the medical press. A study of the obituary pages of the *Journal of the American Medical Association* discloses the fact that too many doctors die young. Too many of them die of diseases that, while not entirely preventable, are controllable—and the matter of control lies with the individual. Few of the professions entail such a high degree of mental stress as does medicine, and fortunate indeed is the physician who has learned the art of play and relaxation. It is not too late to start on that vacation if you have not already had one. In lieu of something else, why not spend a few days at French Lick in early October? Your state convention is then in session and two or three days there, plus a few more days of rest or of gadding about elsewhere, is just about as good a tonic as we can prescribe.

The marked increase in Association membership this year is very gratifying. It means, among other things, that the Indiana doctors have come to recognize the value of medical organization, and that the various county medical society secretaries are on their toes. Despite this increase, there remains much missionary work for those who are interested in lining up every available member of the Indiana medical profession. Some secretaries have found it easier to enlist new members than to get some of the "backward boys" to pay current dues. If the delinquents were all paid up, it would mean the largest membership in our history. We have tried almost everything except giving a bonus in efforts to bring about this Utopian state—and we are seriously considering that! However, it is decidedly pleasing to note that a goal of 3,000 members, which we advocated in these columns some months ago, seems to be a mark that is much too short!

The comment of a writer in the *Marion Chronicle* concerning the death of Dr. E. O. Harrold of that city is so complete that it merits mention here. The writer of the article, Ed W. Camp, was an intimate friend of Dr. Harrold, and he told of Dr. Harrold's indefatigable energy, his intense interest in his profession and the welfare of the community in which he lived. Dr. Harrold knew that he had an incurable ailment, and in discussing this with his friend he remarked, "It's just a devil of a time to die. I have so many things to live for, so many things to be done . . . I've been sick for a long time, but I never disclosed it; nobody, not even one's intimate friends, wants to hear about a man's ills. Certainly people do not want to call a sick doctor." So Dr. Harrold carried on, even though he knew that his time among his patients and friends was short. He carried on in his usual fashion, being careful not to let people know that his time was limited. Stoic, indeed; but that is the sort of stuff of which real physicians are made.

October days are in the near offing, days when we gather for our annual convention, this year down French Lick way. And October is one grand time to go to southern Indiana, always beautiful, but at her best in the nut-brown days, with sunshiny days and cool, moonlit nights. Tom Taggart sends personal assurance that every guest at the French Lick Springs Hotel will be accorded a hearty welcome and that every want will be gratified. Right now several hundred Indiana doctors have made advance registrations, but there is room for all, so do not delay sending in your reservation requests. George Dillinger, general arrangements chairman, has things well in hand and can tell you right now what will be going on at any hour of the day. The scientific program, published in this number of THE JOURNAL, is high class; the entertainment program covers the whole field of things one likes to do in leisure hours. There is but one thing to do—plan right now to go to French Lick for the greatest medical convention ever held in southern Indiana!

A highly reputable physician in an Indiana community has been sued for malpractice, and the suit was instigated directly as the result of uncomplimentary remarks made by another physician. A few years ago it seemed that Indiana was in for an epidemic of such suits, and most of them were directly traceable to other physicians who talked out of turn. The medical press has soundly scored the practice of talking about the other fellow and his method of handling patients, and we thought that Indiana physicians had learned their lessons, but we apparently were mistaken. When a physician is called to see a patient who has been under the care of a confrere, why must he bolster himself by making uncomplimentary remarks? Is he certain that he could have done better if he had had the primary call? Some of these days a medical society will have the temerity to attack this problem in the proper way. The offending member will be called in for a cards-on-the-table hearing and, unless his skirts are fairly clean, he will find himself without the pale, and that is just what such a chap deserves.

A recent price bulletin from the Indianapolis Association of Retail Druggists concludes with the following very interesting admonition: "An educational campaign to acquaint the public with the dangers of syphilis is being given a good deal of publicity at this time. The retail druggists of the United States have a definite responsibility in this connection, and this association takes the position that we as pharmacists are not qualified to prescribe or to suggest a remedy to any patient who in our opinion might be affected by this disease. Quite often the patient first talks to a druggist or a drug clerk about his condition. A survey made by the Medical Society shows that a good percentage of those suffering from syphilis received their first treatment at the hands of the pharmacist. Usually when this is done, the patient is in a more advanced stage before receiving proper medical attention. Let us call your attention to the fact that there still is a code of ethics so far as pharmacy is concerned. In prescribing for cases of this kind or in suggesting treatment you are shooting in the dark with no idea as to the ultimate results. Even though the patient goes to a reputable physician, the physician does not depend upon his diagnosis of the disease. An accurate diagnosis for syphilis entails laboratory tests which we as pharmacists are not in a position to carry out. Remember this that by suggesting or prescribing for this form of ailment you may be a very material contributing factor in spreading syphilis. If the patient is in a position to pay, send him to your closest physician. If he is not in a position to pay, he will be taken care of at the City Hospital. You are going to hear more and more of this campaign as time goes on." This is another evidence of cooperation and determination to combat syphilis and to support physicians in their efforts to conduct an active and successful campaign. The campaign is going strong and each physician must do his part by employing every available method for accurate diagnosis and effective treatment.

CONSTITUTION AND BY-LAWS OF THE INDIANA STATE MEDICAL ASSOCIATION*

The recodified articles of the Constitution of the Indiana State Medical Association will come up for final consideration and adoption at the eighty-eighth annual session of the State Association to be held at French Lick on October 4, 5 and 6, 1937. In 1934, a codification committee was appointed to re-draft both the Constitution and the By-Laws. This committee reported its proposed amendments to the Constitution and changes in the By-Laws at the 1935 session of the State Association at Gary. At that time the House of Delegates authorized the appointment of a new committee to consider this matter and to report its recommendations to the House of Delegates at the South Bend session which was held last October. In general, this new committee recommended the adoption of the amendments and changes as proposed by the original committee. However, this second committee did recommend some changes which differed from the suggestions of the original committee. The changes in the By-Laws recommended by the original committee and those of the 1936 committee were adopted, those of the first committee in 1935, and those of the second committee in 1936. They are, therefore, in effect as printed. The proposed amendments to the Constitution, which are required to lay over a year after their introduction, will come before the House for final action at the French Lick session. The paragraphs which are to be replaced in the Constitution are printed in parentheses while the newly proposed amended sections are printed in bold face type.

ARTICLE I.—NAME OF THE ASSOCIATION

The name and title of this organization shall be the Indiana State Medical Association.

ARTICLE II.—PURPOSES OF THE ASSOCIATION

The purposes of this Association shall be to federate and bring into one compact organization the entire medical profession of the State of Indiana, and to unite with similar societies of other states to form the American Medical Association; to extend medical knowledge and advance medical science; to elevate the standard of medical education and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to guard and foster the material interests of its members and to protect them against imposition; and to enlighten and direct public opinion in regard to the great problems of state medicine, and public health, so that the profession shall become more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life.

ARTICLE III.—COMPONENT SOCIETIES

Component societies shall consist of those county medical societies which hold charters from this Association.

ARTICLE IV.—COMPOSITION OF THE ASSOCIATION

Section 1.—This Association shall consist of Members, Delegates, Guests, and Associate and Honorary Members.

(**Sec. 2.**—*Members.*—The members of this Association shall be the members of the component county medical societies.)

Sec. 2.—*Members.*—**The members of this Association shall be the members of the component county medical societies. Membership in a county medical society on a basis not including membership in the Indiana State Medical Association is not recognized.**

Sec. 3.—*Delegates.*—Delegates shall be those members who are elected in accordance with this Constitution and By-Laws to represent their respective component societies in the House of Delegates of this Association.

Sec. 4.—*Associate Members.*—Members of the Indiana State Dental Association in good standing are, by virtue of their membership therein, made associate members of the Indiana State Medical Association.

(**Sec. 5.**—*Honorary Members.*—Honorary members shall consist of representative teachers and students of science allied to medicine and of physicians and surgeons of distinction not members of the Indiana State Medical Association, who may by vote of the House of Delegates be elected to honorary membership; and any physician of the State of Indiana who has attained the age of seventy-five years and has held membership in the Indiana State Medical Association for twenty years or more may be elected to honorary membership by majority vote of the House of Delegates, provided his name be proposed for such honorary membership by the county medical society of which such physician is a member and payment for THE JOURNAL of the Indiana State Medical Association by such county medical society which proposed such name for honorary membership.)

Sec. 5.—*Honorary Members.*—**Honorary members shall consist of representative teachers and students of science allied to medicine and of physicians and surgeons of distinction not members of the Indiana State Medical Association, who may by vote of the House of Delegates be elected to honorary membership; and any physician of the State of Indiana who has attained the age of seventy-five years and has held membership in the Indiana State Medical Association for twenty years or more may be elected to honorary membership by vote of the House of Delegates, provided his name be proposed for such honorary membership by the county medical society of which such physician is a member.**

Sec. 6.—*Guests.*—Any distinguished physician not a resident of this state who is a member of his own State Association may become a guest during any Annual Session on invitation of the officers of this Association, and shall be accorded the privilege of participating in all of the scientific work for that session.

* Reprinted from the January, 1937, issue of THE JOURNAL.

ARTICLE V.—HOUSE OF DELEGATES

(The House of Delegates shall be the legislative and business body of the Association and shall consist of (1) Delegates elected by the component county societies; (2) the Councilors; (3) the ex-Presidents of the Indiana State Medical Association, and (4) *ex officio* the President, the President-elect, the Executive Secretary, and the Treasurer of this Association, without power to vote, except in case of a tie vote, when the President shall cast the deciding vote.)

The House of Delegates shall be the legislative and business body of the Association and shall consist of (1) Delegates elected by the component county societies; (2) the Councilors; (3) the ex-Presidents of the Indiana State Medical Association; and (4) *ex officio* the President, the President-elect, the Executive Secretary, the Treasurer of this Association, and the delegates to the American Medical Association, all without power to vote, except in case of a tie vote, when the President shall cast the deciding vote.

ARTICLE VI.—COUNCIL

(The Council shall consist of (1) the Councilors, and (2) *ex officio* the President, President-elect, Executive Secretary, and Treasurer. Besides its duties mentioned in the By-Laws, it shall constitute the Board of Trustees of this organization, having full charge and control of all the property of the Association. It shall have full authority and power of the House of Delegates between sessions of the House of Delegates and at all times shall be the finance committee of the Association. Five Councilors shall constitute a quorum.)

The Council shall consist of (1) the Councilors, and (2) *ex officio* the President, President-elect, Executive Secretary, and Treasurer. Besides its duties mentioned in the By-Laws, it shall constitute the Board of Trustees of this organization, having full charge and control of all the property of the Association. It shall have full authority and power of the House of Delegates between sessions of the House of Delegates, except that it shall not make changes in the laws governing the Association nor exercise legislative functions, except as stated in the By-Laws, and at all times shall be the finance committee of the Association. Five Councilors shall constitute a quorum.

ARTICLE VII.—SECTIONS AND DISTRICT SOCIETIES

The House of Delegates may provide for a division of the scientific work of the Association into appropriate sections and for the organization of such Councilor District Societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies.

ARTICLE VIII.—SESSIONS AND MEETINGS

Section 1.—The Association shall hold an Annual Session during which there shall be held daily general meetings and such section meetings as may be provided for, all of which shall be open to all registered members and guests.

Sec. 2.—The time and place for holding each Annual Session shall be fixed by the House of Delegates at the preceding Annual Session.

Sec. 3.—Special sessions of either the Association or the House of Delegates shall be called by the President on petition of twenty delegates or fifty members.

ARTICLE IX.—OFFICERS

(**Section 1.**—The officers of this Association shall be a President, a President-elect, an Executive Secretary, a Treasurer, and thirteen Councilors.)

Section 1.—The officers of this Association shall be a President, a President-elect, an Executive Secretary, a Treasurer, and thirteen Councilors, each of whom shall be a member, except the Executive Secretary, who need not necessarily be either a physician or a member.

Sec. 2.—The officers, except the Councilors and the Executive Secretary, whose election has been provided for hereinafter, shall be elected annually. The terms of elected Councilors shall be for three years and approximately one-third of the number shall be elected annually. All of these officers shall serve until their successors are elected and installed.

Sec. 3.—The officers of this Association shall be elected by the House of Delegates on the morning of the last day of the Annual Session, but no delegate shall be eligible to any office named in the preceding section, except that of Councilor, and no person shall be elected to any such office who is not in attendance on that Annual Session and who has not been a member of the Association for the preceding two years.

Sec. 4.—The Councilors shall be elected by the respective district societies, providing that if any district shall exist without a society, or if the district society fails to meet and elect its Councilor and notify the House of Delegates before or at the time of the Annual Session, the Councilor for such a district shall be elected by the House of Delegates. Provided further, That if a Councilor district society fails to meet and elect its Councilor, the Councilor for that district shall be elected by the House of Delegates.

ARTICLE X.—RECIPROCITY OF MEMBERSHIP WITH OTHER STATE SOCIETIES

In order to broaden professional fellowship, this Association is ready to arrange with other State Medical Associations for an interchange of certificates of membership so that members moving from one state to another may avoid the formality of re-election.

ARTICLE XI.—FUNDS AND EXPENSES

Funds shall be raised by an equal per capita assessment on each component society. The amount of the assessment shall be fixed by the House of Delegates. Funds also may be raised by voluntary contributions, from the Association's publications, and in any other manner approved by the House of Delegates. Funds may be appropriated by the House of Delegates to defray the expenses of the

Association, for publication, and for such other purposes as will promote the welfare of the profession. All motions and resolutions appropriating funds must be referred to the Council for approval before final action is taken thereon.

ARTICLE XII.—REFERENDUM

Section 1.—A General Meeting of the Association may, by a two-thirds vote of the members present, order a general referendum on any question pending before the House of Delegates, and when so ordered the House of Delegates shall submit such question to the members of the Association, who may vote by mail or in person, and if the members voting shall comprise a majority of all the members of the Association, a majority of such vote shall determine the question and be binding on the House of Delegates.

Sec. 2.—The House of Delegates may, by a two-thirds vote of its own members, submit any question before it to a general referendum, as provided in the preceding section, and the result shall be binding on the House of Delegates.

ARTICLE XIII.—THE SEAL

The Association shall have a common Seal, with power to break, change or renew the same at pleasure.

ARTICLE XIV.—AMENDMENTS

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates present at any Annual Session, provided that such amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been published twice during the year in THE JOURNAL of this Association.

BY-LAWS

CHAPTER I.—MEMBERSHIP

Section 1.—Any physician who is a member in good standing of a component county society and who has paid to this Association his annual dues is a member in good standing of the Indiana State Medical Association.

Sec. 2.—No person who is under sentence of suspension or expulsion from a component society, or whose name has been dropped from its roll of members, shall be entitled to any of the rights or benefits of this Association, nor shall he be permitted to take part in any of its proceedings until he has been relieved of such disability.

Sec. 3.—Each member in attendance at the Annual Session shall register by indicating the component society of which he is a member. When his right to membership has been verified, by reference to the roster of his society, he shall receive a badge, which shall be evidence of his right to all the privileges of membership at that session. No member shall take part in any of the proceedings of an Annual Session until he has complied with the provisions of this section.

CHAPTER II.—GENERAL MEETINGS

Section 1.—All registered members may attend and participate in the proceedings and discussions of the General Meetings and the meetings of the sections. The General Meetings shall be presided over by the President or by the President-elect, and before them shall be delivered the address of the President and the orations, unless the Committee on Scientific Work, with the sanction and approval of the officers, shall arrange otherwise.

Sec. 2.—The General or Section Meetings may recommend to the House of Delegates the appointment of committees or commissions for scientific investigation of special interest and importance to the profession and public.

Sec. 3.—No address or paper before the Association, except those of the President and orators, shall occupy more than twenty minutes in its delivery; and no member shall speak longer than five minutes nor more than once on any subject, except by unanimous consent, except the first discussant, who shall be allowed ten minutes.

Sec. 4.—All papers read before the Association or any of the sections shall become its property and shall not be published in any but the official publications of this Association, except by consent of the officers and the Editorial Board of this Association. Each paper shall be deposited with the Executive Secretary when read.

Sec. 5.—The Indiana State Medical Association shall appropriate from its funds the sum of Five Hundred Dollars ($500) annually for the entertainment of its members and guests, this money to be expended at the direction of the President, Executive Secretary, and Treasurer of the State Association, and the Chairman of the Entertainment Committee, who is appointed annually by the President of the Association. All money in excess of that expended for actual expenses incurred at that session is to revert each year to the treasury of the State Association.

CHAPTER III.—SECTIONS

Section 1.—During the Annual Session the Association may meet in the following sections:

a. Surgical.
b. Medical.
c. Eye, Ear, Nose, and Throat.
d. Anesthesia.
e. Any other sections that hereafter may be provided for by the House of Delegates.

Sec. 2.—The officers of each section shall be a Chairman, a Vice-Chairman, and a Secretary, and they shall preside over the meetings of the sections and shall be responsible to the Committee on Scientific Work for the section speakers and papers.

Sec. 3.—The election of officers of the sections shall be the first order of business of the last meeting of the sections during the Annual Session.

Sec. 4.—No section meeting shall be allowed to conflict with a general meeting.

CHAPTER IV.—HOUSE OF DELEGATES

Section 1.—The House of Delegates shall meet the day before or during that fixed as the first day of the scientific meeting of the Annual Session. It may adjourn from time to time as may be necessary to complete its business, provided that its

hours shall conflict as little as possible with the General or Section Meetings. It shall meet on the morning of the last day of the Annual Session for the election of officers for the ensuing year, and for the completion of any business previously introduced. The order of business shall be arranged as a separate section of the program.

Sec. 2.—Each component county society shall be entitled to send to the House of Delegates each year one delegate for every fifty members and one for each major fraction thereof; but, irrespective of the number of members, each component society which has made its annual report and paid its assessments, as provided in this Constitution and By-Laws, shall be entitled to one delegate. The names of duly elected delegates and alternates from each component society shall be sent to the Executive Secretary of this Association annually on or before June first prior to the Annual Session at which such delegates are to serve. No one shall be entitled to a seat in the House of Delegates unless his credentials as a delegate or alternate, properly signed by the Secretary and President of his county society, be presented to the Committee on Credentials at the time of the Annual Session. If any component county medical society is without representation at the end of the roll call, then the members registered in attendance from that county may select from their number a delegate to serve until the regular delegate or alternate appears, and any delegate so named must receive a vote of affirmation from the House of Delegates before he can be seated.

Sec. 3.—Twenty delegates shall constitute a quorum.

Sec. 4.—It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.

Sec. 5.—It shall divide the state into Councilor Districts, specifying what counties each district shall include, and when the best interests of the Association and profession will be promoted thereby, organize in each district a medical society, and all members of component county societies, and no others, shall be members of such district societies.

Sec. 6.—It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates. Such committees shall report to the House of Delegates, and the members of such committees may be present and participate in the debate on their reports.

Sec. 7.—It shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective.

Sec. 8.—Funds may be appropriated by the House of Delegates, subject to approval by the Council, for such purposes as will promote the welfare of the Association and the profession.

Sec. 9.—At the first meeting the President shall appoint from among the members of the House of Delegates, Reference Committees, as hereinafter provided for, and any other committees considered by him necessary to expedite the business of the Association.

CHAPTER V.—ELECTION OF OFFICERS

Section 1.—The election of officers shall be the first order of business of the House of Delegates after the reading of the minutes on the morning of the last day of the Annual Session.

Sec. 2.—All elections shall be by ballot, and a majority of the votes cast shall be necessary to elect. In case no nominee receives a majority on the first ballot, the nominee receiving the lowest number of votes shall be dropped and a new ballot taken.

Sec. 3.—Any person known to have solicited votes for or sought any office within the gift of this Association shall be ineligible for any office for two years.

Sec. 4.—The term of office, unless otherwise specified, shall be for the fiscal year following the date of election.

CHAPTER VI.—DUTIES OF OFFICERS

Section 1.—The President shall preside at all General Meetings of the Association and of the House of Delegates; shall appoint all committees not otherwise provided for; he shall deliver an annual address at such time as may be arranged by the Scientific or Program Committee, and perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the state during his term of office, and as far as practicable, shall visit by appointment the various sections of the state and assist the Councilors in building up the county societies and in making their work more practical and useful.

Sec. 2.—The President-elect's term of office shall be for one year, at the completion of which he succeeds to the presidency. While President-elect he shall assist the President in the discharge of his duties. In the event of the President's death, resignation or removal, the President-elect shall succeed him in office.

Sec. 3.—The Treasurer shall give bond at the expense of the Association in such an amount as shall be required by the Council. He shall demand and receive all funds due the Association, except accounts due THE JOURNAL in the conduct of its business, together with bequests and donations. He shall pay money out of the treasury only on a written order by the President, countersigned by the Chairman of the Council. He shall present to the House of Delegates annually a report of the receipts and expenditures, and the state of the funds in his hands, and shall subject his accounts to such examination as the House of Delegates may order.

Sec. 4.—The Executive Secretary shall attend the General Meetings of the Association, and the meetings of the House of Delegates and the Council, and shall keep minutes of their respective pro-

ceedings in separate record books. He shall be Secretary of all committees of the Association, assist them in the performance of their duties and keep a record of their proceedings. He shall, under instructions from the Bureau or Committee on Publicity, issue and send to lay publications such educational articles as may be prepared and authorized for general publication, and secure and assign medical speakers to address (on invitation) lay organizations on subjects pertaining to individual or community health. He also shall, whenever requested, assist any of the component societies of the Association in securing speakers or otherwise preparing a program for special meetings; he shall at all times hold himself in readiness to advise and aid, so far as practicable, any and all officers or committees of the Association in the performance of their duties or to carry out any of the purposes or policies of the Association. He shall be custodian of all record books and papers belonging to the Association, except such as properly belong to the Treasurer, and shall keep account of and promptly turn over to the Treasurer all funds of the Association which come into his hands. He shall be bonded at the expense of the Association in such an amount as shall be required by the Council. He shall provide for the registration of the members and delegates at the Annual Session. He shall, with the cooperation of the secretaries of the component societies, keep a card-index register of all the legal practitioners of the state by counties, noting on each his status in relation to his county society, and, on request, shall transmit a copy of this list to the American Medical Association. He shall report promptly memberships and proceedings or reports of the House of Delegates, the Council, or any committees of the Association to the Editor of THE JOURNAL for publication. He shall aid the Councilors in the organization and improvement of the county societies and in the extension of the power and usefulness of this Association. He shall conduct the official correspondence, notifying members of meetings, officers of their election, and committees of their appointment and duties. He shall employ such assistants as may be ordered by the Council, and shall make an annual report to the House of Delegates. He shall supply each component society with the necessary blanks for making their annual reports; shall keep an account with the component societies, charging against each society its assessments, collect the same, and at once turn it over to the Treasurer. Acting with the Committee on Scientific Work and the Editor of THE JOURNAL, he shall prepare and issue all programs. The amount of his salary shall be fixed by the Executive Committee on approval of the Council.

Sec. 5.—The necessary expenses of the above officers incurred in the line of duty herein imposed may be allowed by the Council, but excepting the Executive Secretary, this shall not include the expense of attending the Annual Session.

CHAPTER VII.—COUNCIL

Section 1.—The Council shall meet as follows: 1. Annually, in December or January. 2. On the day preceding the first day for the scientific meetings of the Annual Session of the Association. 3. On the last day of the Annual Session of the Association after the adjournment of the House of Delegates. 4. At such other times as necessity may require, subject to the call of the Chairman, or on petition of three Councilors. It shall hold no meeting that will conflict with any meeting of the House of Delegates. It shall elect a Chairman; and a Clerk, who, in the absence of the Executive Secretary of the Association, shall keep a record of its proceedings. It shall, through its Chairman, make an annual report to the House of Delegates. Five Councilors shall constitute a quorum for the transaction of business.

Sec. 2.—Each Councilor shall be organizer, peacemaker, and censor for his district. He shall visit the counties in his district at least once a year for the purpose of organizing component societies where none exist; for inquiring into the condition of the profession, and for improving and increasing the zeal of the county societies and their members. He shall make an annual report of his work and of the condition of the profession of each county in his district, the same to be published in the number of THE JOURNAL which is issued immediately preceding the Annual Session, and the report should be approved by the House of Delegates, with such recommendations as seem indicated. The necessary expenses incurred by such Councilor in the line of the duties herein imposed may be allowed by the Council on a properly itemized statement, but this shall not be construed to include his expense in attending the Annual Session of the Association.

Sec. 3.—The Council shall, through its officers and otherwise, give diligent attention to and foster the scientific work and spirit of the Association, and shall study and strive constantly to make each Annual Session a stepping stone to future ones of higher interest.

Sec. 4.—The Council shall, in connection with the House of Delegates, consider and advise as to the material interests of the profession and of the public in those important matters wherein it is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation and to diffuse popular information in relation thereto.

Sec. 5.—The Council shall make careful inquiry into the condition of the profession of each county in the state and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse among physicians of the same locality and shall continue these efforts

until every physician in every county of the state who can be made reputable has been brought under medical society influence.

Sec. 6.—The Council shall encourage postgraduate and research work, as well as home study, and shall endeavor to have the results utilized and intelligently discussed in the county societies.

Sec. 7.—The Council shall, upon application, provide and issue charters to county societies organized to conform to the spirit of this Constitution and By-Laws.

Sec. 8.—In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies to be designated by hyphenating the names of two or more counties so as to distinguish them from district and other classes of societies; and these societies, when organized and chartered, shall be entitled to all the privileges and representation provided herein for county societies, until such counties may be organized separately.

Sec. 9.—The Council shall be the Board of Censors of the Association. It shall consider all questions involving the rights and standings of members whether in relation to other members, to the component societies, or to this Association. All questions of an ethical nature brought before the House of Delegates or the General or Section Meetings shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members of component societies on which an appeal is taken from the decision of an individual Councilor, and its decision in all such matters shall be final.

Sec. 10.—The Council shall provide for and superintend all publications of the Association, and shall have authority to appoint an editor and such assistants as it deems necessary, and fix the amounts of their salaries. The proceedings of the Council for the year shall be reported to the House of Delegates at the Annual Session and be published in the number of THE JOURNAL which immediately precedes the Annual Session.

Sec. 11.—In the interim between the sessions of this Association the Council shall be the executive body of the Association with full power to fill vacancies or transact any business that emergencies or the welfare of the Association may require.

Sec. 12.—The Council shall employ an Executive Secretary, who need not be a physician nor a member of the Association.

(**Sec. 13.**—The Council shall elect a committee of five members of the Association, three of whom in consequence of their necessarily intimate relationship with the Association shall be President, President-elect, and the Chairman of the Council, which shall be known as the Executive Committee.)

Sec. 13.—The Council shall elect two members of the Association, who, with the President, the President-elect, and the Chairman of the Council, shall constitute and be known as the Executive Committee.

CHAPTER VIII.—STANDING COMMITTEES

Section 1.—The standing committees shall be as follows:

The Executive Committee.

A Committee on Arrangements.

A Committee on Scientific Work.

A Committee on Public Policy and Legislation.

A Committee on Publicity.

A Committee on Industrial and Civic Relationship.

A Committee on Medical Education and Hospitals.

A Committee on Budget.

A Committee on Public Relations.

Such committees, except the Executive Committee, which is elected by the Council, and the Committee on Budget, the membership of which is hereinafter provided for, shall be appointed by the President of the Association, and the President and Executive Secretary of the Association shall be *ex officio* members of all standing committees. The President also may appoint such other committees as may be necessary. No member of the Indiana State Medical Association shall serve as a member of two major committees in any one year.

Sec. 2.—*The Executive Committee*, consisting of five members as heretofore provided for, shall meet regularly once a month with the Executive Secretary to plan and execute such work as may be necessary for the welfare of the Association and the conduct of the Executive Secretary's office. It shall constitute the Medical Defense Committee of the Association and shall have full authority governing all matters pertaining to the medical defense features of this Association, and shall be governed by the rules and regulations concerning such features as provided for in the By-Laws of this Constitution. It shall represent the Council during intervals between meetings of that body and shall report its doings to the Council.

Sec. 3.—*The Committee on Arrangements*, with the advice and assistance of the Executive Secretary, shall provide suitable accommodations for the meetings of the Association, including the House of Delegates, Council, and of their respective committees, the scientific and commercial exhibits, and in conjunction with the Executive Secretary shall have general charge of all the arrangements. Its Chairman shall report an outline of the arrangements to the Executive Secretary of the Association for publication in THE JOURNAL and in the official program, and shall make additional announcements during the session as occasion may require. The arrangements for and the character of any and all commercial exhibits must meet with the approval of the Executive Committee of the Association.

Sec. 4.—*The Committee on Scientific Work* shall consist of three members, one to serve one year, one to serve two years, and one to serve three years, thereafter one to be appointed each year for a period of three years; the senior member to be Chairman.

The President, the officers of the sections, and the Executive Secretary are to be *ex officio* members.

Liaison shall be maintained between the Committee on Scientific Work and the scientific exhibitors. Thirty days previous to each Annual Session it shall prepare and issue a program announcing the order in which papers, discussions, and other business shall be presented. Such program and all announcements concerning the Annual Session shall be published in the number of THE JOURNAL of the Association that is issued just prior to the Annual Session.

Sec. 5. — *The Committee on Public Policy and Legislation* shall consist of three members and the President and Executive Secretary of the Association. Under the direction of the House of Delegates it shall represent the Association in securing and enforcing legislation in the interest of public health, medical education, scientific medicine and the economic welfare of the medical profession. It shall keep in touch with professional and public opinion, shall endeavor to shape legislation so as to secure the best results for the whole people, and to protect the medical profession, and shall strive to organize professional influence so as to promote the general good of the community in local, state and national affairs and elections.

Sec. 6.—*The Committee on Publicity* shall consist of five members, two of which shall be the President and the Executive Secretary of the Association. It shall be responsible for the dissemination of information concerning individual and community health to the lay public through articles prepared for publication in lay publications, or for addresses or talks delivered before lay audiences under the authority of the Association, and shall in every way seek to give the lay public a better knowledge and understanding of the aims and objects of scientific medicine.

Sec. 7.—*The Committee on Industrial and Civic Relationship* shall consist of three members appointed by the President, each to serve for three years, one member to be appointed each year. The duties of the committee shall be: To study, gather facts and become intimately acquainted with all and every movement wherever and by whomsoever agitated, proposed, enacted or attempted to be enacted, that has as its secret or avowed object the providing of social, commercial or industrial medical insurance for the public, civic or commercial employers, or for the providing of medical or surgical care to a group or groups of individuals, singly or collectively, or which in any manner affects the economic and financial status of the members of this Association either individually or collectively; to represent this Association in efforts to secure greater cooperation and a mutual understanding between medical men and employers of labor or their insurance carriers concerning the rendering of professional services in industrial cases and the amount and character of compensation therefor; to devise and advise, whenever necessary, intelligent action on the part of this Association upon these questions; and to report annually, and in writing, its findings, recommendations and information to the House of Delegates. Should occasion arise in the interval between the stated meetings of the House of Delegates when prompt action becomes imperative, the committee is to present its findings to the Chairman of the Council and President, who are to proceed in such emergencies as empowered by this Constitution and By-Laws.

Sec. 8. — *The Committee on Medical Education and Hospitals* shall consist of three members appointed by the President, each to serve for three years, one member to be appointed each year. The duties of this committee shall be to cooperate with the authorities of the Indiana University School of Medicine in efforts to improve the educational standards of the state as they pertain to the practice of medicine; to act in conjunction with the members of the Council in providing postgraduate clinics or teaching for the various Councilor medical districts of the state; to select one of its own members as a delegate to the yearly Conference on Medical Education and Hospitals of the American Medical Association; and to cooperate with the corresponding Council of the American Medical Association.

Sec. 9.—*The Committee on Budget* shall consist of the officers, the retiring President and the chairman of the Council. The duty of this committee shall be to prepare a budget for the ensuing year, and all expenditures of the Association, except those otherwise provided for by the Constitution and By-Laws, shall be governed by the budget. No expense not provided for in the budget shall be incurred by any officer or committee. A committee or an officer may submit a request for funds to meet unusual expenses, which request may be granted by two-thirds vote of the Budget Committee.

Sec. 10. — *The Committee on Public Relations* shall have as its duty to act as liaison between the Indiana State Medical Association, the Indiana University School of Medicine, the Indiana Division of Public Health, and the public; to hear and investigate complaints; to gather facts, and so far as it may be in their province, to correct existing faults and incorrect information; to further cooperation; and to obtain proper and legitimate publicity through the Publicity Committee of all matters of public interest concerning the above.

CHAPTER IX.—REFERENCE COMMITTEES

Section 1.—Immediately after the organization of the House of Delegates at each Annual Session, the President shall appoint from the members of the House, reference committees to serve during the session at which they are appointed. Each committee shall consist of five members, the chairman to be specified by the President. To these committees shall be referred all reports, resolutions, meas-

ures and propositions presented to the House of Delegates, except such matters as properly come before the Council, and the recommendations of these committees shall be submitted to the next meeting of the House of Delegates for acceptance in the original or modified form or for rejection.

Sec. 2.—The following reference committees are hereby constituted:

(1) A Committee on Sections and Section Work to which shall be referred all matters relating to the sections or section work. The members of the Committee on Scientific Work shall be members *ex officio* of this committee.

(2) A Committee on Rules and Order of Business to which shall be referred all matters regarding rules governing the action, methods of procedure, and order of business of the House of Delegates.

(3) A Committee on Medical Education and Hospitals to which shall be referred all matters relating to medical education and medical colleges and hospitals. The members of the standing committee on Medical Education and Hospitals shall be *ex officio* members of this committee.

(4) A Committee on Public Policy and Legislation to which shall be referred all matters relating to state and national legislation, and memorials to the legislature, to the United States Congress, to the Governor of the state, or to the President of the United States. The members of the standing committee on Public Policy and Legislation shall be *ex officio* members of this committee.

(5) A Committee on Publicity to which shall be referred all matters relating to publicity. The members of the standing committee on Publicity shall be *ex officio* members of this committee.

(6) A Committee on Hygiene and Public Health to which shall be referred all matters relating to hygiene and public health.

(7) A Committee on Amendments to the Constitution and By-Laws to which shall be referred all proposed amendments to the Constitution and By-Laws.

(8) A Committee on Reports of Officers to which shall be referred the address of the President and the reports of the Executive Secretary, Treasurer, and the Council.

(9) A Committee on Credentials to which shall be referred all questions regarding registration and the credentials of delegates.

(10) A Committee on Miscellaneous Business to which shall be referred all business not otherwise disposed of.

CHAPTER X.—COUNTY SOCIETIES

Section 1.—All county societies now in affiliation with this Association or those which may hereafter be organized in this state, which have adopted principles of organization not in conflict with this Constitution and By-Laws, shall, on application, receive a charter from and become a component part of this Association. The acceptance or retention of this charter shall be regarded as a pledge on the part of the said component society to conduct itself in harmony with the letter and/or spirit of this Constitution and By-Laws and other rules and resolutions of this Association.

Sec. 2.—Charters shall be issued only upon approval of the Council and shall be signed by the President and Executive Secretary of this Association. The Council shall have authority to revoke the charter of any component society whose actions are in conflict with the letter and/or spirit of this Constitution and By-Laws.

Sec. 3.—Only one component medical society shall be chartered in any county. Where more than one county society exists, friendly overtures and concessions shall be made, with the aid of the Councilor for the district if necessary, and all of the members brought into one organization. In case of failure to unite, an appeal may be made to the Council, which shall decide what action shall be taken.

Sec. 4.—Each county society shall be judge of the qualifications of its own members, but, as such societies are the only portals to this Association and to the American Medical Association, every reputable and legally registered physician who does not practice or claim to practice, nor lend his support to, any exclusive system of medicine, shall be entitled to membership. Before a charter is issued to any county society, full and ample notice and opportunity shall be given to every physician in the county to become a member.

Sec. 5.—Any physician who may feel aggrieved by the action of the society of his county in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Council, and its decision shall be final.

Sec. 6.—In hearing appeals the Council may admit oral or written evidence as in its judgment will best and most fairly present the facts, but in case of every appeal, both as a board and as individual Councilors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

Sec. 7.—When a member in good standing in a component society moves to another county in this state, his name, on request, shall be transferred without cost to the roster of the county society into whose jurisdiction he moves.

Sec. 8.—A physician living on or near a county line may hold his membership in that county most convenient for him to attend, on permission of the society in whose jurisdiction he resides.

Sec. 9.—Each component society shall have general direction of the affairs of the profession in its county, and its influence shall be constantly exerted for bettering the scientific, moral and material condition of every physician in the county; and systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified and honorable physician in the county.

Sec. 10.—At the annual business meeting for election of other officers, in advance of the Annual Session of this Association, each county society shall elect delegates and alternates to represent it in the House of Delegates of this Association, and the secretary of the society shall send a list of such delegates and alternates to the Executive Secretary of this Association annually on or before June first.

Sec. 11.—The secretary of each component society shall keep a roster of all its members and of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this state, and such other information as may be deemed necessary. In keeping such roster the secretary shall note any changes in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

Sec. 12.—The fiscal year of the Association shall be from January 1 to December 31, and all assessments shall be for the fiscal year and *payable in advance*. The secretary of each component society shall forward the assessment for his society, together with the roster of officers and members and list of non-affiliated physicians of the county, to the Executive Secretary of this Association, on or before January 1 of each year, and he shall promptly report thereafter the names of any new members elected to membership in his society, and promptly forward to the Executive Secretary of this Association the assessment for such new members. The assessment shall be the same for all members and entitle the members to all benefits, including the publications of this Association, from the time of paying the assessment to the close of the fiscal year only.

Sec. 13.—Any county society which fails to pay its assessment or make the report required by February 1 of each year shall be held suspended, and none of its members or delegates shall be permitted to receive any of the publications of the Association or participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

Sec. 14.—Each county society shall be held responsible for the faithfulness in the performance of duty on the part of its secretary in making reports and remitting dues or assessments to the Association.

Sec. 15.—Each component society shall have its own Constitution and By-Laws, not in conflict with the Constitution and By-Laws either of this Association or of the American Medical Association, a copy of which shall be filed with the Executive Secretary of this Association; and furthermore, the Executive Secretary shall be notified at once of any changes or amendments that may be made from time to time.

CHAPTER XI.—MISCELLANEOUS

Section 1.—The deliberations of this Association shall be governed by parliamentary usage as contained in Roberts' Rules of Order, when not in conflict with this Constitution and By-Laws.

Sec. 2.—The Principles of Medical Ethics of the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

CHAPTER XII.—MEDICAL DEFENSE

Section 1.—Seventy-five cents out of the annual dues of each member of the Association shall be set aside as a special fund for medical defense.

Sec. 2.—The administration of medical defense of this Association shall be intrusted to the Executive Committee, which shall constitute the Committee on Defense of the Association.

Sec. 3.—This committee shall have full authority governing all matters pertaining to the Medical Defense features of this Association; with power to employ counsel, summon and employ expert witnesses and incur such other expenses as in the judgment of the committee may be necessary in the defense of members against whom suits may be brought; provided, always, that the total expenditure in any single suit shall not exceed 25 per cent of the fund available at the time suit is filed; and provided further that this Association shall not be liable for attorney's fees in such suits unless this committee shall have first agreed in each case with the physician sued and the attorneys representing him in regard to the terms of such employment, including the fees to be paid.

Sec. 4.—The Treasurer of the Indiana State Medical Association shall be custodian of the Defense Fund, separately kept, and shall give such additional bond as may be demanded by the Medical Defense Committee. He shall pay out money from this fund only on the signed order of the Chairman of the Executive Committee and countersigned by the President and the Chairman of the Council.

Sec. 5.—The Medical Defense Committee shall make an annual report to the House of Delegates of the cases in which it has been of service to members and furnish an account of the money received and expended, such report to be published in THE JOURNAL of the Indiana State Medical Association at the time and in the manner that reports of other committees of the Association are published. The financial report of the committee shall be submitted to and approved by the Council.

Sec. 6.—This Association shall not be liable for any damage awarded, but shall be liable only for

such expenses for the legal defense of its members as may be incurred in accordance with the terms of these By-Laws.

Sec. 7.—The Association shall not undertake the defense of a member in a suit that may be brought to secure indemnity for services rendered prior to January 1, 1912, nor in any case in which the member who applies for medical defense by the Association has failed to pay his annual dues for the year in which services were rendered which are the basis of the suit; and medical defense by the Association shall not be available in any suit based on services rendered during any period of delinquency in the payment of dues. (Dues are payable on January 1, and become delinquent on February 1 of each year.) The membership card of this Association, duly signed and dated by the Executive Secretary, shall be considered the only *bona fide* evidence of payment of dues or membership in this Association.

The Indiana State Medical Association shall in no case provide medical defense against any action for alleged malpractice against any physician unless such physician was a member of this Association in good standing at the time the services which are the basis of the suit were rendered.

Sec. 8.—A member desiring to avail himself of the services of the Committee on Medical Defense in connection with litigation brought or threatened must send to the Executive Secretary of the Association for an application blank. After completing the data concerning the case he shall submit to a local committee of his county medical society—to be composed of the President, Secretary and one other member in good standing who may be nominated by the defendant—a full statement of the question at issue, including the diagnosis and treatment of the case and the names of physicians, nurses and other persons having knowledge of the same, who may be summoned as witnesses.

Sec. 9.—The committee of the county medical society shall immediately, after an investigation of all the circumstances and facts, transmit its report, with recommendations, to the Committee on Medical Defense of this Association.

Sec. 10. — Accompanying such report from the county society, if favoring medical defense by the Association, there also must be furnished the written authority of the defendant granting to the Medical Defense Committee of this Association full power to act in his behalf, and an agreement that his case shall not be compromised or settled without the consent of a majority of the Committee on Medical Defense.

Sec. 11.—In the event that the county committee shall fail to recommend the case as one worthy of the recognition of this Association, a direct appeal may be made to the Committee on Medical Defense of this Association, whose decision shall be final.

Sec. 12.—Suits brought against the estate of a deceased member shall be defended as if that member were alive; provided that such member was in good standing in the Association at the time of his death and that services for which indemnity is asked were rendered while the deceased was a member in good standing.

Sec. 13. — Each member of the Committee on Medical Defense of this Association shall be entitled to an honorarium of $10 per diem for services actually rendered while at home, and $30 per diem with traveling expenses, if required to go out of town in the investigation of any case or in attendance at court, and these same fees shall be allowed to expert witnesses under similar circumstances.

Sec. 14.—Medical defense shall not be available to members living outside of the State of Indiana at the time services were rendered for which indemnity is claimed.

Sec. 15. — The Committee on Medical Defense shall have power to adopt such other rules, not in conflict with the foregoing, as in their judgment may seem necessary.

Sec. 16. — Medical defense as provided for by this Association shall be available to members under the terms stated in these By-Laws only in the defense of civil action for alleged malpractice, and shall not be available if such alleged malpractice occurred when the member was under the influence of any intoxicant or narcotic while rendering the service in question.

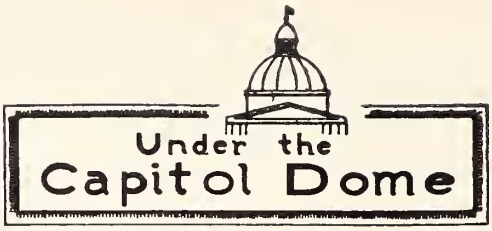
CHAPTER XIII.—DIVISION OF FEES

This Association does not countenance or tolerate fee-splitting, division of fees, or commission paying directly or indirectly, and any member found guilty shall be expelled from membership.

CHAPTER XIV.—AMENDMENTS

Section 1.—These By-Laws may be amended at any Annual Session by a majority vote of all the delegates present at that session, after the amendment has lain on the table for one day.

Sec. 2.—Upon the adoption of this Constitution and By-Laws, all previous Constitutions and By-Laws are hereby repealed.



Eight Hoosier nurses have been accepted for training in a public health nursing course at the University of Michigan, at Ann Arbor. The course is a United States Public Health Service fellowship. All are graduate nurses and were selected on a merit basis. They will be eligible for appointments as public health nurses in counties or cities after they complete the course. They will begin their work at the University in September. Final selections were made by Dr. Verne K. Harvey, secretary of the State Board of Health. The nurses are: Lucille Kleiser, of Mishawaka; Eleanor Brown, of Muncie; Gertrude Kelly, of Indianapolis; Mrs. Jessie Ingram King, of Gary; Helen Vieting, of Hamlet; Mrs. Sara Reynolds Stephan, of Jeffersonville; Marcella T. Wirtner, of LaPorte, and Margaret Torr, of Indianapolis.

A campaign to prevent the spread of disease through unsanitary conditions in public eating and drinking establishments in Indiana has been launched by the Bureau of Food and Drugs working with health units of the local health administration, Dr. Verne K. Harvey, secretary of the State Board of Health, has announced.

State food inspectors, city and county health officials, and sanitary officers of district units are cooperating in the drive. The campaign will continue unabated as a means of protecting the public.

Legal action will be taken if sanitary regulations are not met by restaurant, tavern and soda fountain operators. Particular attention will be paid to the washing and sterilization of glassware and eating utensils.

An exhibit on venereal disease control will be the feature display of the State Board of Health at the 1937 Indiana State Fair. Dr. Verne K. Harvey, secretary of the board, will be in general charge.

A dental health display is to be another interesting exhibit. It will review the program of dental education which was carried on in connection with the schools and outline future plans. The Bureau of Dairy Products and the Bureau of Sanitary Engineering will have a combined exhibit on the "vicious circle made by disease and filth."

Displays, charts, and free literature will be available to mothers, nurses, and teachers in an exhibit displayed by the Bureau of Public Health Nursing and the Bureau of Maternal and Child Health.

DEATHS

CHARLES F. SEXAUER, M.D., of Newcastle, died August first, aged seventy-nine years. Dr. Sexauer practiced at Hartford City and about nineteen years ago went to Newcastle where he had been employed in the Indiana Epileptic Village near Newcastle. He graduated from Western Reserve University School of Medicine, Cleveland, in 1884, and from the College of Physicians and Surgeons of Baltimore, Maryland, in 1894. He was a member of the Henry County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

JOHN H. SOWERS, M.D., of South Whitley, died August eighth, of paralysis agitans. Dr. Sowers was seventy-one years old. He retired from active practice nine years ago. Dr. Sowers graduated from the Cincinnati College of Medicine and Surgery in 1889. He had been a member of the Whitley County Medical Society, the Indiana State Medical Association and the American Medical Association.

JOHN T. MARTIN, M.D., of Mount Ayr, died July eleventh, at the home of a sister in Seymour, Iowa, where he had gone for a visit. Dr. Martin had practiced at Mount Ayr for thirty years. He graduated from the Hahnemann Medical College and Hospital, Chicago, in 1895. He was seventy years old.

ALEXANDER A. ROSS, M.D., of East Chicago, died suddenly as the result of a heart attack July nineteenth. Dr. Ross, a member of the staff of St. Catherine's hospital, had practiced in East Chicago for thirty-seven years. He was a graduate of the Medical Faculty of Trinity University, Toronto, Canada, in 1897. Dr. Ross was born in Ontario and spent his childhood there. He first practiced in Bradford, Pennsylvania, and then in Glen, Michigan, before he went to East Chicago in 1900. Dr. Ross was sixty-eight years old. He was a member of the Lake County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

WILLIAM R. MATHEWS, M.D., of near Madison, Indiana, died July twenty seventh, aged sixty-four years. Death was attributed to heart disease. Dr. Mathews was sixty-three years old, and had spent his entire life in the neighborhood of China, Indiana, practicing medicine in Jefferson County since 1897. He graduated from the Medical College of Indiana, Indianapolis, in 1896, and was a

member of the Jefferson County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

Edward Ernest Parker, M.D., of South Bend, died July twenty-eighth, aged sixty-six years. Dr. Parker had practiced in South Bend for seventeen years. After his graduation from the Medical College of Indiana, Indianapolis, in 1898, Dr. Parker practiced in Flora, Indiana, for two years. For eighteen years he practiced in Culver, Indiana, and was staff physician at Culver Military Academy. He was a member of the St. Joseph County Medical Society, the Indiana State Medical Association and the American Medical Association.

John L. Hutchins, M.D., of Bicknell, died August tenth, aged sixty-eight years. Dr. Hutchins had been city health officer for Bicknell for the past ten years. Born in Maine, Dr. Hutchins came to Bicknell in 1904, and had remained there with the exception of a period of seven years, 1919 to 1926. He graduated from the Kentucky University, Medical Department, Louisville, in 1904.

Clarence Leroy Bock, M.D., of Muncie, died suddenly July twenty-fourth while assisting with an operation at Ball Memorial Hospital. Death was due to a heart ailment.

Dr. Bock was fifty-one years old. He graduated from the Indiana University School of Medicine in 1915 and specialized in urology. He had served as president of the Delaware-Blackford County Medical Society and as president of the Muncie Academy of Medicine, and in addition to those organizations he was a member of the Indiana State Medical Association, a Fellow of the American Medical Association and a Fellow of the American College of Surgeons. He served with the medical corps during the World War, serving with Base Hospital No. 31 in France where he remained until the close of the war. He was mustered out with the rank of captain.

Oscar S. Deitch, M.D., of Indianapolis, died July twenty-seventh, aged seventy-one years. Dr. Deitch was a graduate of the Medical College of Indiana, Indianapolis, in 1890, and had been a practicing physician on the west side of Indianapolis for many years.

HOOSIER NOTES

Dr. Carl B. Parker has moved from Danville to Wingate, Indiana, where he will be associated with Dr. F. D. Allhands.

Dr. George E. Scott, of Scircleville, has completed his work at the Waterbury Hospital, Waterbury, Connecticut, and has entered the practice of medicine at Wabash, in association with Dr. Arthur P. Rhamy.

Edwin L. Patrick of Indianapolis has contributed $100,000 to the Indianapolis City Hospital for a cancer clinic. The clinic will be known as Patrick Hall, in memory of Mr. Patrick's wife and her parents. It is believed to be the first municipal cancer clinic.

Dr. Charles J. Brockway, of Brookston, lectured on "The Holy Land" as one of the features of the Chautaqua program at Remington, August tenth. Dr. Brockway's lecture was illustrated with colored views of the shrines and temples in Palestine and Syria.

Dr. W. D. Inlow of Shelbyville attended the Rotary International Conference in Nice, France, and gave an account of his visit to the members of the Shelbyville Rotary club, July 22.

Work has been started on a new clinic building for Drs. Washburn and Johnson of Rensselaer. The building will contain five physicians' offices and a dentist's office.

Dr. Bertha Rose has been appointed physician for women students at Purdue university and will take up her work there in September. Dr. Rose had charge of school health work at Michigan City for many years, and for the past year has been assistant physician in the Gary schools.

The third annual meeting of the Mississippi Valley Medical Society will be held at Quincy, Illinois, September 29, 30, and October 1, 1937. Registration fee will be $3.00.

The sixth annual meeting of the Indiana County Hospital Association was held at Wabash, July twenty-fifth. Dr. Thurman B. Rice was speaker at the afternoon meeting. H. H. Davis, of Clinton, was elected chairman of the association.

Dr. Margaret Owen, for the past ten years assistant to the Indiana University physician at Bloomington, has resigned her position to engage in general practice in Indianapolis. Dr. Edith Schuman, of Bloomington, has been appointed to succeed Dr. Owen on the University staff.

Dr. Gordon B. Wilder of Anderson discussed the status of medicine in Europe in comparison with the United States in a talk before the members of the Anderson Rotary Club, July twenty-seventh. Dr. Wilder based his remarks upon observations made during a recent trip to Europe.

Dr. M. Joseph Barry was re-elected president of the Indianapolis City Board of Health at a recent meeting. Dr. Leonard A. Ensminger was made vice-president, and Dr. Herman G. Morgan was made secretary for the twenty-sixth consecutive year.

Dr. Frank Gastineau of Indianapolis talked on "Social Diseases in Indianapolis" at the Service Club meeting, July nineteenth.

In addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Burbot Liver Products Co.,
  Rowell's Burbot Liver Oil.
Eli Lilly & Co.,
  Combined Diphtheria Tetanus Toxoid, Alum Precipitated.
  Tablets Carbarsone 0.05 gm. (¾ grain).
  Tablets Carbarsone 0.25 gm. (3¾ grains).
  Suppositories Carbarsone, 2 grains.
Wm. S. Merrell Co.,
  Cod Liver Oil Concentrate Tablets-Merrell.
Sharp & Dohme, Inc.,
  Staphylococcus Toxoid-Mulford.
Winthrop Chemical Co., Inc.,
  Avertin with Amylene Hydrate.
Abbott Laboratories
  Ampules Gold Sodium Thiosulfate-Abbott, 0.025 gm.
  Ampules Gold Sodium Thiosulfate-Abbott, 0.5 gm.
  Physiological Salt Solution.
  Dextrose 5 per cent in Physiological Salt Solution.
  Dextrose 10 per cent in Physiological Salt Solution.
  Dextrose 10 per cent Solution.
  Dextrose 5 per cent Solution.
  Dextrose 5 per cent in Ringer's Solution.
  Dextrose 5 per cent in Lactate-Ringer's Solution.
Hoffman-LaRoche, Inc.
  Tablets Larocaine Hydrochloride, 0.25 gm.
Merck & Co., Inc.
  Ampules Ceboine Sodium Solution, 2.1 c.c.
  Tablets Cebione, 0.025 gm.
Sharp & Dohme, Inc.
  Capsules Digitalis Leaves.
E. R. Squibb & Sons
  Tablets Digitalis-Squibb, ½ cat unit.
  Capsules Powdered Digitalis-Squibb, 1½ grains.

The annual meeting of the American Public Health Association will be held October 5-8 in New York City. Inquiries should be addressed to the American Public Health Association at 50 West 50th Street, New York City. Subjects for discussion are nutritional problems, child hygiene, waterborne diseases, the crippled child, and syphilis in industry. There will be a three-day institute on public health education before the annual meeting begins, and there will be special sessions on mental hygiene, the hygiene of housing, and on public health advancing.

During the coming fall, winter and spring, the toast "Your Health" will become more familiar to radio listeners for that program of the American Medical Association and the National Broadcasting Company will be continued for the fifth season. The first two seasons were devoted to health talks, and the last two years to dramatized health messages. This year, the salutation will be addressed particularly to the teachers and students in the junior and senior high schools in the hope that the program will be helpful in illustrating, amplifying, and enriching the health teaching in those schools. The program will be on the air while schools are in session so that it may reach thousands of schools which now have or soon will have radio and public address systems reaching the class rooms. While the program is planned especially for high schools, it will not sacrifice the interest which it has held for listeners in the home. Programs will be announced in advance in *Hygeia*.

The ninth annual training course for Medical Department reservists of the Army and Navy will be held at The Mayo Foundation, Rochester, Minnesota, October 3 to 16, 1937. The program will follow the plan of past years. Morning hours will be devoted to professional work in special clinics and study groups. Officers in attendance may select the course they wish to follow from the variety of presentations offered. The afternoon and evening will be devoted to a medico-military program under the direction of the Surgeon of the Seventh Corps Area (Army) and the Surgeon of the Ninth Naval District. This training is on an inactive duty status and is without expense to the government. Enrollment is open to all Army and Navy reservists of the Medical Departments in good standing. Applications should be submitted to the Surgeon of the Seventh Corps Area, Omaha, Nebraska, or to the Surgeon of the Ninth Naval District, Great Lakes, Illinois. Enrollment is limited to two hundred. The Surgeons

General of the Army and Navy have signified that they will attend, and it is believed that the Surgeon General of the Public Health Service also will be on the program.

SHORT COURSE IN TUBERCULOSIS

The Indiana Tuberculosis Association announces its 1937 program of short courses in tuberculosis for the physicians of Indiana with the purpose of acquainting physicians with recent progress in the treatment of tuberculosis. The round table method will be followed and part of the time will be devoted to clinics and demonstrations. The courses will be presented as follows:

Smith-Esteb Memorial Hospital, Richmond, September 2.

Madison State Hospital (Cragmont), North Madison, September 9.

Irene Byron Sanatorium, Fort Wayne, September 14.

Indiana State Sanatorium, Rockville, September 15.

Healthwin Sanatorium, South Bend, October 11.

Boehne Tuberculosis Hospital, Evansville, October 12.

Lake County Tuberculosis Sanatorium, Crown Point, October 14.

Sunnyside Sanatorium, Indianapolis, October 21.

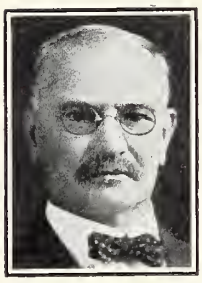
William Ross Sanatorium, Lafayette, November 9.

It is requested that interested physicians signify their choice of place; registration blanks may be obtained from the Indiana Tuberculosis Association, 1220 Security Trust Building, Indianapolis.

INTERSTATE POSTGRADUATE ASSEMBLY

The Inter-State Postgraduate Medical Association of North America will meet in St. Louis, Missouri, October 18-22, 1937. Pre-assembly clinics will be held October 16, and post-assembly clinics will be held October 23. Dr. George Crile is chairman of the program committee which has arranged a program to meet the demands of the general practitioner as well as the specialist. The St. Louis Medical Society will be host to the Assembly and has arranged a list of committees which will function during the assembly. A tentative list of the distinguished teachers and clinicians who will take part in the program will be found on page xxii in this JOURNAL. A cordial invitation is extended to all members of the profession who are in good standing in their state or provincial societies to be present. Registration fee of $5.00 will admit each member to all scientific and clinical sessions. Further information may be obtained by writing to Dr. W. B. Peck, managing-director, Freeport, Ill.

DR. STEMM COMPLETES FIFTY YEARS OF PRACTICE



Dr. William H. Stemm, of North Vernon, a past president of the Indiana State Medical Association (1919), and Mrs. Stemm received a genuine tribute from the members of the Fourth District and the Tri-County Medical Societies, their wives and guests at a dinner given in their honor at the Muscatatuck State Park Inn, August fourth. Dr. Stemm, who graduated from medical college in 1887, completed his fiftieth year in the practice of medicine this year, and his fellow doctors, in order to express their admiration for him and his wife who aided him through all those years, arranged this affair under the direction of Dr. D. L. McAuliffe, of North Vernon, president of the Jennings County Medical Society, and Dr. John H. Green, of North Vernon, acted as toastmaster.

The meeting was a complete surprise to Dr. Stemm, who was told that he would be expected to discuss a scientific paper that Dr. E. D. Clark, of Indianapolis, president of the State Association, would read. It was not until Dr. Green opened the meeting with a tribute to Dr. and Mrs. Stemm that Dr. Stemm realized the gathering was in his honor.

In addition to his position as president of the State Association, Dr. Stemm served for many years as councilor from the Fourth District and as vice-president of the state organization and as mayor of North Vernon.

Among the speakers were Dr. E. D. Clark, of Indianapolis; Dr. Herman N. Baker, of Evansville, president-elect of the State Association; Dr. Charles E. Gillespie, of Seymour, a past president of the State Association, who read an amusing original poem about Dr. Stemm; Dr. J. K. Hawes, of Columbus; Dr. E. C. Totten and Dr. George Denny, of Madison. A greeting to Dr. Stemm written by Dr. William N. Wishard, of Indianapolis, was read by Thomas A. Hendricks. Dr. Wishard and Dr. Stemm served together on the Council of the State Association for many years.

Dr. McAuliffe presented watches upon behalf of the Tri-County Society (Jackson, Jennings and Bartholomew Counties) to both Dr. and Mrs. Stemm.

Dr. David W. Robertson, of Deputy, who has completed fifty years as a physician, was present and was introduced to the guests.

INDIANA UNIVERSITY NEWS NOTES

Interneships in hospitals in 18 different states have been granted to 97 graduates of this year's class of the Indiana University School of Medicine. Sixty-five of the young doctors will be located in Indianapolis, twelve in hospitals elsewhere in the state, while the remaining twenty will do their interne work in the following states: Washington, New Jersey, New York, Louisiana, Massachusetts, Washington, Minnesota, Iowa, Illinois, Ohio, Michigan, California, Missouri, Kentucky, Pennsylvania, North Carolina and Hawaii.

Twenty-six of the men who received the M. D. degree from Indiana last month will be at the Indianapolis City Hospital, twenty-one at the Indiana University Hospitals, and nine each at the St. Vincent's Hospital and the Methodist Hospital of Indianapolis. Other cities in Indiana where I. U. internes will be are Muncie, Lafayette, Hammond, Fort Wayne, South Bend, Evansville, and Anderson.

The complete list is as follows:

Indianapolis City Hospital: Joseph Bernstein, Indianapolis; Asa Bloom, Marion; Donald Caseley, Greencastle; Walter Cohn, Indianapolis; James Engeler, Indianapolis; Asa Fender, Bedford; James Funkhouser, Indianapolis; Dee Gill, Indianapolis; Wait Griswold, Indianapolis; William Hart, Indianapolis; Marshall Hewitt, South Bend; Lowell Hillis, Logansport; William Hutto, Kokomo; Thomas Johnson, Dunkirk; Hunter Kennedy, Indianapolis; Melvin Lichtenberg, Indianapolis; Jack Loudermilk, Indianapolis; George McCoy, Indianapolis; Leonard Miller, Indianapolis; Walter F. Ramage, Indianapolis; Harry Rotman, Jasonville; Gerald Somers, Fort Wayne; Richard Swan, Indianapolis; E. Paul Risher, Indianapolis; James Topolgus, Gary; William Tranter, Franklin.

Indiana University Hospitals: Noel Bailey, Peru; Harry Baum, Madison; Louis Bixler, Elkhart; Richard Bloomer, Rockville; Arthur Burnett, Paragon; Lintner Clark, Muncie; Cecil Hurst, East Chicago; Donald Lashley, Evansville; Howard Marks, Sullivan; Richard Miller, North Vernon; Mary Alice Norris, Indianapolis; Paul Pentecost, Liberty; Frank Scott, Shelbyville; James Sims, Indianapolis; Robert Smithson, Evansville; Frederic Spencer, Kempton; James Stewart, Marion; William Strang, Indianapolis; Benet Thayer, Indianapolis; Robert Vandivier, Franklin; Charles Voorhis, Indianapolis.

St. Vincent's Hospital, Indianapolis: John Eisterhold, Evansville; James Fuelling, Woodburn; Harold Hill, Indianapolis; Max Mansfield, Indianapolis; Russell Reynolds, Garrett; Kenneth Sheek, Greenwood; Joseph Spalding, Indianapolis; John Spears, English; Francis Williams, Anderson.

Methodist Hospital, Indianapolis: Edward Bloemker, Indianapolis; Kenneth Brown, New Albany; Marvin Cuthbert, Kokomo; Harold Ericson, Decatur; E. Blair Harter, Hagerstown; Hugh Miller, Elkhart; Floyd Romberger, West Lafayette; Sydney Stevens, Indianapolis; Oliver Wilson, Frankfort.

Ball Memorial Hospital, Muncie: Naomi Dalton, Bloomington; Sarah Hiestand Larmore, Pennville.

St. Margaret's Hospital, Hammond: Robert Husted, Woodburn; Raymond Modjeski, Hammond.

St. Joseph's Hospital, Fort Wayne: Dillon Kennington, Michigan City; Halden C. Woods, Yoder.

St. Elizabeth's Hospital, Lafayette: Raymond DuBois, Kokomo.

Epworth Hospital, South Bend: Joseph Marmore, Anderson.

Lutheran Hospital, Fort Wayne: Herman Meyer, North Manchester.

Welborn-Walker Hospital, Evansville: Alfred Scales, Stendal.

John Hickey Memorial Hospital, Anderson: Robert Williams, Anderson.

Protestant Deaconess Hospital, Evansville: William Wood, Evansville.

Tacoma General Hospital, Tacoma, Wash.: Raymond Bennett, Hammond.

General Hospital, Elizabeth, N. J.: Sol Berman, Elizabeth, N. J.

Albany Hospital, Albany, N. Y.: Lester Borough, South Bend.

Public Health Service, U. S. Marine Hospital, New Orleans, La.: Melvin Coffel, Kokomo.

Peter Bent Brigham's and Children's Hospital, Boston, Mass.: Marion Connerley, Terre Haute.

Public Health Service, U. S. Marine Hospital, Seattle, Wash.: Carl Culbertson, Vevay.

Ancker Hospital, St. Paul, Minn.: Fred Dick, Jr., Huntington.

Iowa State University Hospitals, Iowa City, Iowa: Ramon Henderson, Ridgeville.

Public Health Service, U. S. Marine Hospital, Chicago: Theodore Hilbish, Bristol.

Israel Zion Hospital, Brooklyn, N. Y.: Simon Mendelsberg, Brooklyn, N. Y.

City Hospital, Springfield, O.: Stephen Michaelis, Fort Wayne.

Receiving Hospital, Detroit, Mich.: Robert Miller, Somerville.

Homer Phillips Hospital, St. Louis, Mo.: Mitchell Ralston, Indianapolis.

Queen's Hospital, Honolulu, Hawaii: Ogden Pinkerton, Lowell.

Public Health Service, U. S. Marine Hospital, Stapleton, Staten Island, N. Y.: Wendell Preston, Indianapolis.

Beth-El Hospital, Brooklyn, N. Y.: Meyer Rosenberg, Brooklyn, N. Y.

Western Pennsylvania Hospital, Pittsburgh: Robert Royster, Evansville.

San Diego County Hospital, San Diego, Calif.: Warren Tucker, Salem.

City Memorial Hospital, Winston-Salem, N. C.: Ralph Wolfe. Sullivan.

St. Joseph's Hospital, Louisville, Ky.: Martin Strange, Loogootee.

Dr. William N. Wishard, of Indianapolis, has given to the Library of the Indiana University Medical Center the diploma granted to his father, Dr. William H. Wishard, in 1849 by the Indiana Medical College at LaPorte, Ind. Dr. Wishard was the first of three generations of physicians. He attended lectures at the Ohio Medical College both before and after his graduation at LaPorte.

This diploma is a souvenir of the first medical school of importance in either Indiana or Illinois. The college was organized in 1842 as the medical department of LaPorte University, and later chartered as the Indiana Medical College.

Another gift from Dr. Wishard to the I. U. Medical Library is a pair of hand-forged obstetrical forceps bought by his father in 1845 from the Max Wocher firm of instrument makers in Cincinnati.

Mrs. C. C. Collins of Roachdale has added to the previous gifts of her husband to the I. U. Medical Library three medical instruments and a number of medical textbooks. The instruments are a Mercer sphygmomanometer, a spiral rectal tube and a pair of obstetrical forceps of 30 or 40 years ago. Dr. Collins died last September. He had practiced in Roachdale since 1894.

Dr. Gerald D. Timmons, secretary of the Indiana University School of Dentistry and of the American Association of Dental Schools, has accepted an invitation from Frances V. Perkins, secretary of Labor, to serve on a national advisory committee for the purpose of developing health policies affecting the administration of the Social Security Act.

The committee will advise with the Children's Bureau of the United States Department of Labor "in the development of sound policies governing relationships between the Federal Government and the state in the general advancement of the health and welfare of American mothers and children," according to Secretary Perkins.

Dr. Timmons has served as dental advisor to the Indiana Board of Health in the development of the state's dental program. Among the members on the new national committee will be Dr. Willard Camalier, Washington, D. C., president, American Dental Association; Dr. Guy Millberry, dean of the University of California School of Dentistry; Dr. Bert Andersen, Yale University; Dr. Long Morrey, head of Bureau of Public Relations, American Dental Association.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

June 22, 1937.

Present: William N. Wishard, M. D., chairman; F. M. Gastineau, M. D., and Thomas A. Hendricks, executive secretary.

The release, "July Fourth Suggestions," approved for publication in Saturday papers, July 3.

Reports on medical meetings:

April 28—Ball State Teachers College, Muncie. "Cancer." (22 present).

April 28—Kiwanis Club, Muncie. "Cancer." (50 present.)

April 29—Cass County Medical Society, Logansport. "Protamine Zinc Insulin in the Management of Diabetes Mellitus." (22 present.)

April 29—Ladies' Aid Society of the Christian Church, Wilkinson. "Venereal Disease." (75 present.)

Requests for speakers:

June 3—Fountain-Warren County Medical Society, Covington. Speaker obtained to talk on an orthopedic subject.

June 16—Parke-Vermillion County Medical Society, Clinton. Speaker obtained to talk on pediatrics.

June 22—Rotary Club, Seymour. Speaker obtained to talk on "Some Child Health Problems that Fathers Should Know About."

July 14—Rotary Club, Crawfordsville. Speaker obtained to talk on "Syphilis."

Date not set—Monroe County Adult Education Council, Bloomington. Request for speaker on cancer, heart trouble, or tuberculosis.

Article from the *Buffalo Medical Journal* of April, 1910, in regard to fee splitting ordered copied by the Bureau of Publicity so that in the near future a release upon that subject may be prepared by the Bureau to be sent to the papers of the state.

Letter received from the son of a past president of the Indiana State Medical Association stating that he would be very pleased to give to the Association at some future time a chair which the Association had presented to his father. The Bureau of Publicity instructed the secretary to thank the writer of the communication for his offer, stating that the Association will be very pleased to receive the chair whenever the donor desires to deliver it to the headquarters office.

July 9, 1937.

Present: William N. Wishard, M. D., chairman; F. M. Gastineau, M. D., and Thomas A. Hendricks, executive secretary.

The release, "Parent-Teacher Summer Round-Up," approved for publication in Saturday, July 17, papers.

Report on medical meeting:

June 16—Parke-Vermillion County Medical Society, Clinton, Ind. "Summer Pediatrics." (10 present.)

Request for speaker:

July 15—Annual picnic, Tippecanoe County Medical Society, Monticello.

Bulletin of the Indianapolis Better Business Bureau brought to the attention of the Bureau of Publicity. The Bureau commends the Better Business Bureau for its articles in regard to:

"Marmola, a fat-reducing concoction which contains thyroid extract;"

"Optical Swindlers;"

"Quackery of J. R. Brinkley and His Formula No. 1020;"

"Dr. L. R. Emerick Diabetes 'Cure'" which has been barred from the mails;

False and misleading advertising in connection with the sale of "Doan's Pills" and the exaggerated claims for Doan's Pills;

"Neet, Inc.," a depilatory, and

"Pinex Company, Fort Wayne, Ind." which is advertising an alleged effective remedy for coughs.

The Bureau of Publicity instructed the secretary to prepare an exhibit of flood pictures and flood articles which will show the work of the Indiana profession during the Ohio river flood emergency period of last winter.

BUREAU OF PUBLICITY

July 21, 1937.

Present: William N. Wishard, M.D., chairman; F. M. Gastineau, M.D., and Thomas A. Hendricks, executive secretary.

The release, "Indiana Proposes to Dispose of Syphilis," to be redrafted and presented to the Bureau previous to distribution for publication Saturday, July 31.

Report on medical meeting:

July 14—Rotary Club, Crawfordsville, Indiana. "Syphilis." (45 to 50 present.)

Request for speaker:

August 4—Tri-County Medical Society, Muscatatuck State Park, North Vernon. Fiftieth anniversary meeting for a past president of the Indiana State Medical Association.

The following letter was received by the Bureau of Publicity in regard to the action of the American Medical Association concerning rebates from optical companies and manufacturers of surgical apparatus:

"I can find nothing in the records of the Atlantic City Session indicating that any action was taken pertaining to rebates received by physicians from optical companies or manufacturers of surgical apparatus.

"Away back in 1924 the Judicial Council was asked for an official expression concerning the practice of physicians dispensing eye glasses who sent prescriptions to manufacturers or wholesalers and charged their patients retail prices on delivery of the glasses, the physicians retaining the difference between the wholesale and retail cost of the glasses, and the Council included in its official report to the House of Delegates a recommendation to the effect that this matter be referred to the Section on Ophthalmology.

"The Section on Ophthalmology, at the annual session of the Association held in Chicago in 1924, adopted a resolution deprecating the selling of glasses by ophthalmologists to patients in communities where the services of reliable dispensing opticians are obtainable and specifically stating that the acceptance of commissions or considerations, directly or indirectly, from opticians or optical houses for the sale of glasses is absolutely contrary to all our standards of medical ethics and is just as reprehensible as the splitting of fees."

Copies of the article which appeared in the *Buffalo Medical Journal* of April, 1910, entitled, "Dividing Professional Fees," by Matthew D. Mann, M.D., Buffalo, distributed to each member of the Bureau. The Bureau instructed the secretary to send a copy of this article to each member of the Executive Committee of the State Association.

A letter was received from a county medical society in the southern part of the state concerning a group of physicians who are advertising in rural directories. The Bureau instructed the secretary of the State Association to write to the secretary of the particular society involved, informing him that in the opinion of the Bureau, this matter should be brought up before the board of censors of the local society. After the board of censors makes a complete study of the matter it may, if it so desires, refer the question to the Bureau of Publicity for its opinion, along with detailed material that has been developed by the board of censors or some committee of the local medical society empowered by the local society to make the investigation.

Letter received from a physician asking for an opinion in regard to so-called "health certificates" for prostitutes. The certificate reads as follows:

"Office Hours Dr_____, M.D. Office Phone ——
By Appointment Specializing in Residence Phone —
Street Address Genito-Urinary Diseases ————, Indiana

HEALTH CERTIFICATE

I hereby certify that I have this date_____ examined _____ and find her free from Gonorrheal Infection at this time_____.

Signed_____, M.D."

The Bureau of Publicity issues the following general statement concerning such certificates:

1. In issuing a certificate such as the above, the physician is giving to prostitutes a professional statement to enable them to continue prostitution which is very discreditable to the medical profession.

2. The certificate plan has been tried officially in many cities and has proved a failure and is not regarded as dependable.

3. It is very doubtful whether a dependable certificate can be given as it is not always possible to make a correct diagnosis.

4. To be at all dependable, a certificate would have to be given following each act of intercourse.

5. The Bureau of Publicity distinctly disapproves any form of certificate and especially the one which appears above where the certificate is utilized by a physician to announce his specialty.

6. The Bureau regards this entire practice as unethical and as being distinctly in bad taste. Indeed the Bureau feels that it is not only bad taste but bad science.

* * *

July 28, 1937.

Present: William N. Wishard, M.D., chairman; F. M. Gastineau, M.D., and Thomas A. Hendricks, executive secretary.

The release, "Indiana Proposes to Dispose of Syphilis," corrected and set for publication in Monday morning papers, August 2.

Request for speaker:

August 4—Tri-County Medical Society, Muscatatuck State Park, North Vernon. Fiftieth anniversary meeting for a past president of the Indiana State Medical Association. The president, president-elect and the secretary of the State Association are to be present at this meeting and a note of greeting is to be written by the chairman of the Bureau of Publicity.

Article from the *Buffalo Medical Journal* of April, 1910, entitled, "Dividing Professional Fees," distributed to members of the Executive Committee.

Article in *Reader's Digest* entitled, "Optometry on Trial," brought to the attention of the Bureau. The Bureau moved that this article be brought to the attention of the editor of THE JOURNAL of the Indiana State Medical Association, suggesting that the article be abstracted for publication in THE JOURNAL.

Pictures of the faculty of the first medical school in Indiana and of the building housing the medical department of LaPorte University (1840) brought to the Bureau by the chairman. The Bureau suggested that these pictures be framed and that a statement concerning the pictures of the faculty and this first university be prepared by the chairman of the Bureau. This statement should be framed along with the pictures and exhibited at the annual meeting of the State Association at French Lick. Afterwards the pictures are to be placed in the headquarters office.

INDIANA STATE BOARD OF HEALTH

BUREAU OF COMMUNICABLE DISEASES

Monthly Report, July, 1937

J. W. Jackson, M.D.

Diseases	*July, 1937*	*June, 1937*	*May, 1937*	*July, 1936*	*July, 1935*
Tuberculosis	487	247	223	301	177
Chickenpox	39	139	304	24	24
Measles	588	2,148	2,677	24	89
Scarlet fever	138	320	456	127	90
Smallpox	29	61	73	2	7
Typhoid fever	42	12	4	20	28
Whooping cough	330	297	352	115	146
Diphtheria	42	29	29	41	41
Influenza	21	39	55	48	48
Pneumonia	31	69	49	76	33
Mumps	26	73	199	26	33
Poliomyelitis	31	1	2	4	2
Meningitis	5	7	11	6	7
Undulant fever	5	0	1	1	0
Amebic dysentery	1	1	0	0	0

COUNTY SOCIETY REPORTS

CARROLL COUNTY MEDICAL SOCIETY members held their regular monthly meeting at Monticello, July twentieth. Dr. Verne K. Harvey, director of the State Board of Health, was the guest speaker.

* * *

CLINTON COUNTY MEDICAL SOCIETY members and their wives enjoyed a social meeting at Monticello, July twenty-second. Dinner was served at the Sportsman Club, after which the guests played bridge.

* * *

DAVIESS-MARTIN COUNTY MEDICAL SOCIETY members met at Burns City, July twenty-seventh. This was a social meeting, with the wives of the members as guests. In the forenoon, the group visited the resetttlement project at Burns City. The next meeting will be held August twenty-fourth at Shoals.

* * *

LAKE COUNTY MEDICAL SOCIETY members held their annual picnic and golfing party at the Lake Hills Country Club, August twelfth.

* * *

PARKE-VERMILLION COUNTY MEDICAL SOCIETY and doctors from Warren and Vigo Counties attended the meeting of the society held on the Dr. S. C. Darroch farm near Cayuga, Sunday, July eleventh. Several physicians had their saddle horses sent to the farm and spent the afternoon riding.

* * *

PERRY COUNTY MEDICAL SOCIETY was host to a joint meeting with the Spencer County Medical Society July twenty-eighth, in Tell City. Drs. Mettell, Ferree and Hicks from the Indiana State Department of Public Health were the speakers.

* * *

WHITLEY COUNTY MEDICAL SOCIETY members held their midsummer picnic at Crooked Lake near Columbia City, July thirteenth, at the summer home of Dr. and Mrs. E. V. Nolt. After an afternoon of golf, fishing and boating and swimming, the group had dinner at the Goss Hotel at Big Lake.

BOOKS

BOOKS RECEIVED

AIDS TO PHYSIOLOGY. By Henry Dryerre, Ph.D., M.R.C.S., professor of physiology, Royal (Dick) Veterinary College; examiner in physiology for Royal College of Surgeons, Edinburgh, etc. Second edition. 295 pages. Illustrated. Printed in Great Britain. Cloth binding. Price $1.25. William Wood and Company, Baltimore, 1937.

* * *

TREATMENT BY DIET. By Clifford J. Barborka, B.S., M.D., department of medicine, Northwestern University Medical School, Chicago; formerly consulting physician, The Mayo Clinic. Third edition, revised. Illustrated. 642 pages. Cloth binding. $5.00. J. B. Lippincott Company, Philadelphia, 1937.

* * *

AN INTRODUCTION TO DERMATOLOGY. By Richard L. Sutton, M.D., professor of dermatology, University of Kansas School of Medicine, and Richard L. Sutton, Jr., A.M., M.D., instructor in dermatology, University of Kansas School of Medicine. Third edition. 666 pages. Cloth. Price $5.00. C. V. Mosby Company, St. Louis, 1937.

(Continued on Page xxx)

PROFESSIONAL PROTECTION

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GYNECOLOGY—Two Weeks' Intensive Course starting September 20th and October 18th.

FRACTURES & TRAUMATIC SURGERY—Informal Practical Course; Ten Day Intensive Course starting October 11th.

OPHTHALMOLOGY — Two Week's Intensive Course starting September 20th.

OTOLARYNGOLOGY — Two Weeks' Intensive Course starting October 4th.

UROLOGY — General Course Two Months; Intensive Course Two Weeks; Special Courses. Cystoscopy. Ten Day Course every two weeks.

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TREATMENT OF BRONCHIECTASIS

CRIMM, STRAYER & BAKER

(Continued from Page 439)

such method may become an excellent prophylaxis against bronchiectasis.

OPERATIVE TREATMENT

Several operative procedures have proved to be no better than symptomatic treatment. Pneumothorax generally diminishes the production of sputum, but it returns in whole or part after the decompression. Compression of the lung, however, makes the patient a better surgical risk for any subsequent operative procedure. Phrenic nerve operations do not close multiple sacculations unless thoracoplasty is later performed. Even then if the bronchiectatic lesions are large or are situated near the mediastinum, the results are not satisfactory. Cases which have large dilatations and a copious production of sputum become worse following paralysis of the diaphragm. If acutely ill, this type of case obtains relief from cautery pneumectomy.

Lobectomy offers the only curative method for certain types of bronchiectasis. The age of the patient, the presence of other complications, the character, extent and location of the bronchial dilatations are problems which must be studied before lobectomy is indicated. In addition to this, lobectomy is a formidable operation. Graham[1] states that a patient with bronchiectasis who submits to an operation runs about a 15-20 per cent risk of dying because of the operation, and if he recovers from the operation, he has only a 65 per cent chance of having a thoroughly satisfactory result with solid healing of the wound. Therefore, it pays to be conservative in advising lobectomy. Out of 34 cases of bronchiectasis admitted to this hospital for differential diagnosis during the past five years, only one lobectomy in a girl 23 years of age was performed. A second case, a boy age 10, is being prepared for lobectomy by means of pneumothorax. A number of these cases in different stages of the disease were treated by means of bronchoscopic drainage.

CASE REPORT — LOBECTOMY

The patient, a well developed, undernourished, white female, age 23, was admitted to the hospital on February 6, 1935, complaining of cough and sputum production. She had had a cough with purulent expectoration for at least ten years. During the past three years production of sputum had increased with periodic attacks of fever and night sweats. Past history revealed the usual childhood diseases, including a severe case of pertussis.

Physical examination was essentially negative, except for an atrophic rhinitis. Chest examination showed moist rales over the entire left lobe. X-ray demonstrated increased fibrosis along the lower bronchi in the left lung and a hazy infiltration at termination of several bronchi. Lipiodol injection revealed sacculated dilatations in this same area. The right lung was negative.

Sputum examination was negative for tubercle baccilli. Diplococci, streptococci, staphylococci and pus cells were present. The urine was normal except for an occasional pus cell. The white blood count was 10,950; red blood count, 4,150,000; hemoglobin (Newcomer) 83 per cent; Wassermann, negative. Weight, 107½ pounds. Temperature and pulse rate, normal. Patient was treated with postural drainage and a high vitamin diet. In two months patient had gained to 116 pounds.

On May 3, 1935, a first-stage operation (after the two-stage method of Alexander[2]) was performed. Gas-oxygen, intratracheal closed method, was used. After removal of the seventh rib, the parietal pleura was incised. It was found that the lung was not adherent. The pleura of the upper lobe was massaged with gauze. Following this a small amount of three per cent tincture of iodine was painted on the upper lobe. The lung was expanded with a positive pressure during the closure of the wound. The wound was closed without drainage. The patient made an uneventful recovery except for the formation of fluid, which was later absorbed. During the first few days, patient's temperature was 101 degrees. Pulse rate and temperature were normal 14 days after the operation.

On July 25, 1935, the second-stage operation was performed. Incision parallel to the old incision was made. The eighth and ninth ribs were resected. The parietal pleura was carefully incised and found adherent to the visceral pleura over both upper and lower lobes. The interlobar septum was located and adhesions between the upper lobes were freed by dissection. Scissor dissection was necessary for the adhesions approximate to the heart. The pedicle was ligated with two double ligatures. Iodoform gauze was packed around the pedicle of the lower lobe and drainage tubes inserted. The wound was irrigated several times a day to aid in removal of the necrotic lobe. The patient ran a temperature of 100-103 degrees for the next 14 days. Pulse rate ranged between 120 and 150 for five days following operation. Six weeks after date of operation, the patient was ambulatory. Weight, 97 pounds. Wound gradually closed. Patient was discharged on March 29, 1936.

Bronchoscopy examination in June, 1936, showed stump to be infected as the result of a severe sinusitis and bronchitis. Since that time patient has been bronchoscoped and treated with staphylococcus vaccine following any acute infection of the respiratory tract. Present weight is 123 pounds and the general condition is excellent. The patient is working and is at least temporarily benefited.

[1] Graham, E. A.; Singer, J. J., and Ballon, H. C.: Surgical Diseases of the Chest. Leo & Febiger, 1935.

[2] Alexander, John: Total Pulmonary Lobectomy (A Simple and Effective Two-Stage Technic). *S. G. & O.*, Vol. LVI, No. 3 (March), 1933.

When acidosis accompanies anesthesia and toxicity follows surgical trauma . . . .

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On Changing Brands of Cigarettes . . .

"It was interesting . . . to find how many patients changed from one brand of cigarettes to another . . . because of the effect on their throats."
Flinn, "Laryngoscope" Feb. 1935—Page 152

OBVIOUSLY irritation of the nose and throat is a constant source of annoyance to smokers.

It is of importance to the medical profession to know that cigarettes in which diethylene glycol is used as the hygroscopic agent have been scientifically proved* less irritating than those in which glycerine is used. In Philip Morris diethylene glycol is used exclusively.

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★*Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245* ☐
Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154 ☐
N. Y. State Jour. Med., June 1935, Vol. 35, No. 11 ☐
Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60 ☐

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BOOKS

(Continued from Page xxvii)

MANUAL OF DISEASES OF THE EYE. For Students and General Practitioners. By Charles H. May, M.D., consulting ophthalmologist to Bellevue, Mt. Sinai and French Hospital, New York. Fifteenth edition, revised, with the assistance of Charles A. Perera, M.D., instructor in ophthalmology, College of Physicians and Surgeons, Medical Department of Columbia University, New York. 498 pages, with 376 original illustrations, including 25 plates, with 78 colored figures. Cloth. Price $4.00. William Wood and Company, Baltimore, 1937.

* * *

CONDITION SATISFACTORY. A physician's report of his own illness. By Dr. Sandor Puder. Foreword by Frigyes Karinthy. Translated from the German by Hildegard Nagel. 200 pages. Cloth. Price $2.00. Alfred A. Knopf, New York, 1937.

* * *

OBSTETRIC AND GYNECOLOGIC NURSING. By Frederick H. Falls, M.S., M.D., F.A.C.S., professor of obstetrics and gynecology, University of Illinois, College of Medicine; and Jane R. McLaughlin, B.A., R.N., supervisor of the department of obstetrics and gynecology, Research and Education Hospital, University of Illinois, College of Medicine. 492 pages, with 83 illustrations by Charlotte S. Holt. Cloth. $3.00. C. V. Mosby Company, St. Louis, 1937.

* * *

EMOTIONAL ADJUSTMENT IN MARRIAGE. By Le Mon Clark, M.D., assistant in obstetrics and gynecology, University of Illinois College of Medicine. 261 pages. Cloth. Price $3.00. The C. V. Mosby Company, St. Louis, 1937.

* * *

TEMPLE UNIVERSITY OBSTETRICAL GUIDE-BOOK with the "Temple Treatment" of Eclampsia and "Obstetrical Review Clinics." By J. O. Arnold, M.D., F.A.C.S., professor of obstetrics, Temple University Medical School. 197 pages, with flexible fabric binding. Price $2.50. The Corson Publishing Company, Philadelphia, Pennsylvania, 1937.

* * *

Supplement to U. S. P. XI

The first supplement to the U. S. Pharmacopœia XI has just been issued and will become official on December 1, 1937. It is a booklet of about 100 pages and may be obtained from the Mack Printing Company, Easton, Pennsylvania, at $1.00 per copy, postpaid. In this supplement, all of the texts revised to June 1, 1937, are reprinted in full so that there can be no misunderstanding of the authorized changes.

BOOKS REVIEWED

MEDICAL UROLOGY. By Irvin S. Koll, B.S., M.D., F.A.C.S., attending urologist, Michael Reese Hospital. 431 pages with 92 text illustration and 6 color plates. Cloth. Price $5.00. C. V. Mosby Company, St. Louis, 1937.

In presenting a small but useful treatise on urology to be used by the general physician, any author is handicapped in the beginning, for he will find it difficult to know what to include and what to leave out of such a text. In his effort to present the subject in a concise and clear manner, Dr. Koll has done well, for at times the reader will come across many direct and useful statements as to exactly what is to be done in the diagnosis and treatment of urological lesions. The book is not free, however, from many instances where (in this reviewer's opinion) the whole category of the urological condition "may be due to this and may be due to that," leaving the reader no clear-cut opinion to be formed.

(Continued on Page xxxii)



THE HIGH TOLL OF LATE *syphilis* CAN BE REDUCED



"IT HAS BEEN ESTIMATED[1] that in the United States annually one-half million people with late syphilis seek treatment for the first time. . . ." It is hoped that these figures will be reduced as a result of the many publicity campaigns now under way. These patients will require careful supervision and persistent treatment.

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For literature address Professional Service Dept., 745 Fifth Avenue, New York, N. Y.

[1] Cole, Harold N., *et al.; J. A. M. A.* 108:22, 1937.

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BOOKS

(Continued from page xxx)

In such a dilemma the reader may, of course, revert to other and larger texts to simplify his immediate situation. The book will serve a useful purpose when used by the general practioner or medical student. The references, printed at the close of each chapter, seem ample but there are no direct reference numbers carried in the text, a method much preferred by this reviewer because it simplifies further reading on one particular point.

ANNUAL REPRINTS OF THE REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY of the American Medical Association for 1936, with the Comments That Have Appeared in the *Journal*. Cloth. Price, $1. 104 pages. Chicago: American Medical Association.

This book is essentially a record of the negative actions of that distinguished body, the Council on Pharmacy and Chemistry of the American Medical Association; that is, it sets forth the findings concerning medicinal preparations which the Council has voted to be unacceptable for recognition and use by the medical profession. Many of the reports record outright rejection or the rescinding of previous acceptances; others report in a preliminary way on products which appear to have promise but are not yet sufficiently tested or controlled to be ready for general use by the profession.

Among the reports on out-and-out unacceptable products are Amend's Solution and the "Igol" products, iodine preparations marketed under misleading or unacceptable claims, the latter under an uninformative proprietary name; Androstine-Ciba, claimed to be a testicular extract and found to be an irrational combination of inactive preparations, marketed with unwarranted and misleading claims; Gadoment, a preparation of cod liver oil in a wax base with zinc oxide benzoin and phenol, proposed for use in the treatment of burns, cuts and minor skin irritations, found unacceptable as being an unoriginal product of insufficiently declared composition marketed under a coined proprietary name with unwarranted therapeutic claims, and indirectly advertised to the public; the "Carasyl" preparations which are essentially mixtures of psyllium flour, karaya gum and fig flour, marketed with unsubstantiated therapeutic claims under a proprietary name.

In 1934 the Council sponsored an exhaustive report on bacteriophage therapy which pointed out that in view of the present status of knowledge, no such preparations could be accepted for New and Nonofficial Remedies. In this volume of the collected Council reports, the Council declares the "Phagoid" preparations, a line of bacteriophage products, definitely unacceptable because they are offered to the medical profession with unscientific, unwarranted claims, thus encouraging physicians to use in a routine way medicaments, the therapeutic value of which had not been established, and because the preparations conflicted in other ways with the rules of the Council.

This volume includes a preliminary report on Trichophytin and Oidiomycin—trichophyton preparations marketed by Lederle Laboratories, Inc. This report is a sequel to the preliminary report on Trichophyton Extract issued in 1932, which postponed consideration to await development of further clinical evidence on Trichophyton therapy. Also included in this volume is a report on the unacceptability of two trichophyton preparations, Dermatomycol and Dermotricofitin, distributed in this country by Ernst Bischoff Co., Inc., under the stated proprietary names without sufficiently declared composition and with unwarranted therapeutic claims.

Other preliminary reports are Refined and Concentrated Antipneumococcic Serum Type VIII—Lederle, Present Status of Tetrachlorethylene (since accepted for N. N. R.), Smallpox Vaccine (From Chick Chorio-Allantoic Membrane)—Lilly, and Use of Trichloroethylene for General Anesthesia.

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PRACTICAL MANAGEMENT OF PREMATURES*

R. A. CRAIG, M.D.

Kokomo

Infant mortality during the first year of life has decreased over one-half in the last 25 years; during the first month it has lessened only by one-sixth, while during the first week the decrease has been even less. Thus in Minnesota, in 1916, deaths in infants under one week comprised 40 per cent of all deaths occurring during the first year. In 1933 they represented 55 per cent of such deaths. Two-thirds of all infant deaths now occur before the end of the first month.

Prematurity as a cause of death has shown almost no reduction in recent decades. Birth injury as a cause of fatality is increasing. This may be accounted for in part by more accurate diagnosis of such accidents, but also to a definite degree it is ascribable to the tendency to operative and instrumental methods of delivery. It has been said that 40 per cent of the neonatal deaths could have been prevented by adequate prenatal and obstetrical care. A study in Boston showed that infant mortality in those cases lacking prenatal care was double that in properly supervised cases, while stillbirths were over 50 per cent greater. Death during the first month of life is caused by asphyxia, atelectasis, prematurity or birth injury in two-thirds of the cases. Nearly one-third die of infection contracted before, during, or after delivery. Less than three per cent of such deaths can be attributed to congenital anomalies.

With better care during the first few hours and with confidence that something can be done instead of the conviction that the baby will die anyway, more premature babies will be saved. I shall present a few cases to show the results of proper care under adverse circumstances.

For the purposes of this paper, prematurity and immaturity may be considered under one head. Those born before nine months of intra-uterine life are premature and should be treated as such. Twins, triplets and quintuplets must be cared for as prematures because they are as poorly prepared for extra-uterine life as a premature and, as a matter of fact, they are usually born prematurely. Other infants may be born at full term or later and yet may be under-developed or malnourished because of diseases of the mother, such as pernicious vomiting, tuberculosis, or others. These sometimes present a more difficult problem than the healthy premature.

There are six important things about premature and immature babies that must be taken into consideration:

1. The respiratory center is insensitive—therefore, the breathing is irregular and may even cease simply because there is too little carbon dioxide to stimulate it.

2. The thermo center is under-developed and the baby's temperature will vary with the surroundings like that of a cold-blooded animal. I have seen the rectal temperature as high as 105 degrees (due to an over-heated crib) and as low as 92, and still the babies lived.

3. The sucking reflex is impaired, but it is surprising how soon it returns even in the very small babies.

4. The digestive system is under-developed, and it is this knowledge that encourages too much caution in the feeding. The capacity is so small that we under-feed if we believe that a food is more digestible when diluted.

5. The caloric requirement of premature babies is higher than that of full-term babies because there is so little storage of glycogen and iron; so it becomes more important not to under-feed these infants.

6. Vitamins seem to be deficient, especially vitamin D, to the extent that nearly all will develop rickets unless guarded against diligently.

In the management of prematures, there has been much written about the temperature and humidity of the crib or incubator, and they are important points, but they can be summed up briefly by saying that the temperature should be that which will keep the infant's rectal temperature at 99 degrees, and a pan of water in the incubator will maintain the humidity. This tem-

* Presented before the Tipton County Medical Society, November, 1936.

perature may be maintained by a 40 to 100-watt electric light bulb, hot water bottles, or the weather. Our procedure usually is to make a wire frame over a baby basket. Cover it with a sheet, usually doubled, leaving an opening on one side through which the infant may be fed or changed. Hang a light bulb about the center, shade it so that it will not shine directly in the child's face. Put a pan of water inside the crib with a sponge in it. Place a thermometer alongside the baby. Then the nurse can determine the crib's temperature at all times. This can be done by opening or closing the side of the cover or by varying the size of the light bulb.

One common error is in the selection of clothing to cover the infant. The heat must get to him; the problem is not to conserve his heat. So the less cover and clothing he has, the warmer he will be. A thin layer of cotton pinned over him will be convenient and protective. Olive oil baths may be given inside the crib.

Hardly enough stress has been paid to the prevention of infections. The mildest rhinitis or bronchitis is a very dangerous thing. The attendants should always wear masks and should not be permitted to nurse others who have infectious diseases.

One of the reasons why many of these infants die is because they simply cease to breathe. This accident may be prevented by using 5% carbon dioxide through a catheter into the nose at the rate of 60 to 80 bubbles per minute through water.

Feeding of prematures must be adjusted to the needs of the premature even more carefully than those born at full term. The capacity of the stomach may be only a dram, and the caloric requirements are more than those of a full-term baby. A common error is to dilute the feeding, believing that the digestive capacity is impaired and that diluting the milk in some way makes it more digestible.

Breast milk is said to be the best milk and it probably is, but if the baby is born at 6 or 7 months there is usually no breast milk from the mother, and if there were, the baby could not obtain it because of the lack of the sucking reflex. If unable to take rather large amounts, the caloric requirement cannot be met unless it is boiled down to about half its volume. This necessitates obtaining milk from the mother or access to a human dairy, the former not being very successful over a long period of time and the latter not available in most places. Also these prematures must be fed earlier than full-term babies and we cannot wait for the mother's milk to come in.

A satisfactory substitute is evaporated milk undiluted, or diluted to the point where the amount ingested will provide 70 to 100 calories per pound per day. This is fed by a Breck feeder if possible, or if there is no sucking or swallowing reflex, it is fed by catheter. By using the Breck feeder, the sucking reflex is soon developed and a nipple and bottle may be used early.

Powdered protein milk with a small amount of carbohydrate added may be fed in concentrated form usually twice the ordinary concentration. This is especially useful if there are too frequent stools. They may be kept on this feeding for weeks and thrive. Fat is probably the cause of more indigestion than carbohydrates, and protein is needed for growth.

Vomiting is rather common and usually is due to too much food. The volume should be lowered and the concentration increased if necessary.

When these infants can take a large volume, the concentration should be less so that more water can be given at feeding time in the formula and there will be less disturbing the patient, giving no water between feedings. Also they frequently develop a gastro-intestinal upset if a concentrated formula is continued after they can take a normal quantity. Thus the usual process of increasing the concentration of the formula as the child gets older is reversed, and a less concentrated mixture is given as the quantity he can take increases.

Vitamin D should be started early and in larger amounts than generally given for prophylaxis because of the tendency to develop rickets. It is advisable to avoid the fat of cod liver oil and give one of the concentrated mixtures. Vitamin C should be started the first month. Orange juice is usually well tolerated.

Iron has not been stored before birth and should be supplied in addition to that contained in the milk.

The weight determines the time to feed the baby as a full-term and he may be taken from the incubator when the body temperature does not vary with the variation of the room temperature. This is usually about six pounds.

There are two commonly annoying conditions in premature babies. One is general lassitude—no activity, irregular, shallow breathing. Raising the temperature of the covered crib may be the remedy but we often give 10 c.c. whole blood by peritoneum or intravenously. The other is infection. Infections of any description are dangerous. Diarrhea may be combated with protein milk, colds by increasing the humidity and giving normal saline frequently, subcutaneously. Food should be given regularly and the ears should be inspected frequently.

Clean individual nursing and no visitors provide the best prophylaxis against infections.

A few prematures reach normal size and development at six months, while the majority of them reach normal between one and two years. A small number do not attain the status of a normal child until three or four years.

Practically all prematures have heads which appear to be hydrocephalic, and this is partially due to rickets. No small number have spasms in

the first two years, or three, and these are due to lack of calcium or due to cerebral hemorrhage at time of birth.

The following case reports are given not to present a new or better method of caring for prematures, but to illustrate methods and procedures under adverse circumstances and to give encouragement to those physicians who may lament their lack of equipment.

CASE REPORTS

Case 1. Baby F., age 4 days, born January 22. Father came to the office and asked for feeding instructions and said they were keeping it in a basket behind a stove and could not get it to nurse. He lived 20 miles in the country and the weather was cold. He was asked to bring it to the hospital and keep it warm because that was very important. He brought it in with three hot water bottles and two or three fruit jars of hot water in the basket with the baby. Its temperature when they arrived was 104.6 by rectum, weight 2 pounds 8 ounces. The infant had a lusty cry. While it was at home it could not be roused. It was put in a basket incubator heated with a light bulb to 90 degrees F. and given a formula of evaporated milk, 4 ounces; water, 4 ounces, and Karo, 1 teaspoonful. She took 2 drams every hour and was kept on this formula for two weeks with a gain of 8 ounces. The formula remained the same and she was given her capacity which increased until she was 2 months old when she was taking 2 ounces every three hours and weighed five pounds.

Orange juice was started at 1 month, cod liver oil at 5 weeks. The formula was not changed until she was 5 months old when she was taking seven four-ounce feedings daily. Her weight was then 8 pounds, 3 ounces. She was then sent home and given cereals at 6 months, vegetables at 7 months, whole milk at one year. She weighed 18 pounds at one year.

Case 2. Baby L., age 3 weeks. Seen at home, the infant was cold and could not be aroused. He had an ashen color. He was sent to the hospital at once, and rectal temperature was 92. Weight, 2 pounds, 13 ounces. In the incubator his temperature rose to 99.8 in five hours and he took 1 ounce every 2 hours of a formula composed of evaporated milk, 4 ounces, water, 4 ounces, and Karo, 1 teaspoonful, from a Breck feeder. He gained 6 ounces in 7 days and then began to regurgitate food and lose weight. Diarrhea occurred and in two days he lost 9 ounces. Ten c.c. of the mother's blood was given in the peritoneum. Next day 100 c.c. of normal saline was given subcutaneously. Feedings were retained and stools became normal. Normal saline was given three times subsequently, 100 c.c. each time, at intervals of three days, but there was only a very slight gain. Protein milk in triple concentration, fortified with Karo, was given. This was better digested but gain was slow. After two weeks the evaporated milk formula was given and the infant gained rapidly.

Viosterol and halibut liver oil were started at two months. Orange juice was given two weeks later. The infant was fed to capacity until at four months he was taking three ounces every three hours, seven feedings per day. He weighed 7 pounds, 6 ounces.

Case No. 3. Baby L. F., born in July when the temperature was 100 in the shade. Twenty-four hours old when first seen; weight, 1 pound, 12 ounces. The infant was born in the country, and there was no electric current in the house. An incubator was prepared and the temperature of the crib was kept at 100 degrees Fahrenheit at night by means of hot water bottles; no heat was needed in the day time. Feeding consisted of evaporated milk and Karo with no dilution. By medicine dropper, the infant took about one dram every two hours.

After two weeks, this child was removed to the city to the home of a nurse and remained there for six weeks. There electric lights were used as a method of heating. Diarrhea developed at two months and the child lost weight very rapidly. She was given protein milk and was taken to the hospital, where three blood transfusions were given at two-day intervals. She was left in the hospital until she was eight months old when she weighed twelve pounds. At nine months she had measles with no complications, and at one year she weighed fourteen pounds. At six years she started to school and apparently was normal in every respect.

ABSTRACT

ARTIFICIAL FEVER THERAPY OF GONORRHEA IN THE MALE: COMPARATIVE STUDY

E. H. Parsons, P. N. Bowman and D. E. Plummer, Denver (*Journal A. M. A.*, July 3, 1937), compared a series of gonorrhea cases in the male treated with artificial fever therapy with a similar series treated by more time-honored methods. The clinical material available for this study consisted of eighty-seven young men, all except one of whom were white. All were between the ages of 18 and 49. Forty-three were treated with fever therapy and forty-four by the usual means. The number of cures in each group of acute gonorrhea was the same, 72.2 per cent, but the fever-treated cases showed no residuals (such as chronic prostatitis) and accomplished the result in approximately one-third the time required in the control group. The control group were under treatment a total of 594 days longer than were the fever-treated group. The number of cured cases of acute prostatitis and complications in the fever-treated group is significantly greater than is the case of the control group. The time required for the treatment of the fever-treated group was approximately one-fourth that necessary in the control group. Cases of acute prostatitis with urinary retention and severe pain, in the fever-treated group, were uniformly rendered asymptomatic in one treatment. In the control group less than one-third of the cases of chronic prostatitis and complications were classed as cured, whereas the fever-treated group showed definite cures in all but two cases. These last two cases were twelve and fifteen years, respectively, in duration. The time required for treatment was approximately four times as long in the control group as in the fever-treated group.

TRUE CONGENITAL DEXTROCARDIA WITH SITUS INVERSUS CORROBORATED BY ELECTROCARDIOGRAPHIC AND X-RAY FINDINGS*

H. N. MIDDLETON, M.D.
Indianapolis

A review of the literature to date shows that congenital dextrocardia with transposition of the viscera is an exceedingly rare condition. True dextrocardia is so rarely found that there has been some confusion in the terminology. The term dextrocardia should be reserved for that cardiac condition in which the heart by its own congenital development, and independent of disease or abnormality of surrounding tissues, is situated in the right side of the thorax, with the apex pointing to the right. This is the definition given by S. S. Lichtman.[1] In 1931 he reviewed the available literature, including 161 case reports of true dextrocardia, and added case reports of two patients observed by himself. As often as possible in the case report, x-ray and electrocardiographic findings were included.

Dr. Levine[2] defines the condition as follows: "Congenital dextrocardia is of two types: In the first the apex of the heart points to the right, but is formed by the right ventricle.

"The heart is essentially rotated more to the right so that the left ventricle lies more anterior than normally but yet to the left of the right ventricle. This condition is due to a congenital arrest in development and therefore is generally associted with such abnormalities as absence of or defects in the septa, transposition of the arterial trunks, etc. Such patients are apt to suffer serious handicaps. The second type, called 'mirror-picture' dextrocardia, is practically always associated with a complete transposition of the viscera (the liver and appendix being on the left, the spleen on the right, etc.). Here the apex of the heart points to the right, is felt near the right nipple, but is made up of the 'left ventricle' (the one receiving the blood from the lungs). The right ventricle and auricle lie to the left. There are no other defects in the heart and such patients have no symptoms referable to the circulation. This condition is often overlooked until accidentally found on routine examination. It cannot be regarded as an arrest in the development. It suggests rather an inversion of the embryo in its relation to its primitive yolk sac.

"The electrocardiograms in mirror-picture dextrocardia are absolutely pathognomonic. Lead I will show inverted P and R waves just as would result if the lead wires in taking a normal lead I were accidentally reversed. Patients with this condition have a normal life expectancy and need not be restricted in their activities."



Figure 1.

In 1925 LeWald[3] had reported situs transversus as a compartively rare condition occurring once in 5,000 autopsies, once in 35,000 examinations of recruits for the U. S. Army, and 29 times out of 40,000 roentgen ray examinations of the chest and abdomen.

Moffett and Neuhoff[4] had reviewed the literature from 1649 to 1915 and were able to find only 126 reported cases of true congenital dextrocardia.

The electrocardiograms in mirror-picture dextrocardia are absolutely pathognomonic. The electrical axis of the heart lies in the opposite direction to the normal in this condition. Therefore when the ordinary three leads are taken, lead I will be a mirror-picture of the normal lead I. That is, all the deflections will be inverted. Lead II will resemble a normal lead III and vice versa, and when the right and left arm wires are reversed and the left leg electrode is placed on the right leg, curves of normal appearance will be obtained.

* Read at the Madison County Medical Society meeting, Anderson, Indiana, May 17, 1937.

[1] Lichtman, S. S.: *Arch. Int. Med.*, 48:683 (Oct.); 866 (Nov. pt. 1), 1931.

[2] Levine, S. A.: Clinical Heart Disease, pp. 202-203, 1936.

[3] LeWald, Leon T.: Complete Transposition of the Viscera; Report of 29 Cases with Remarks on Etiology. *Jour. A. M. A.*, Jan. 24, 1925, Vol. 84, pp. 261-267.

[4] Moffett, R. D., and Neuhoff, S.: Congenital Dextrocardia with Patent Interventricular Septum. *Am. Jour. Dis. Child*, 1915, x, 1-15.

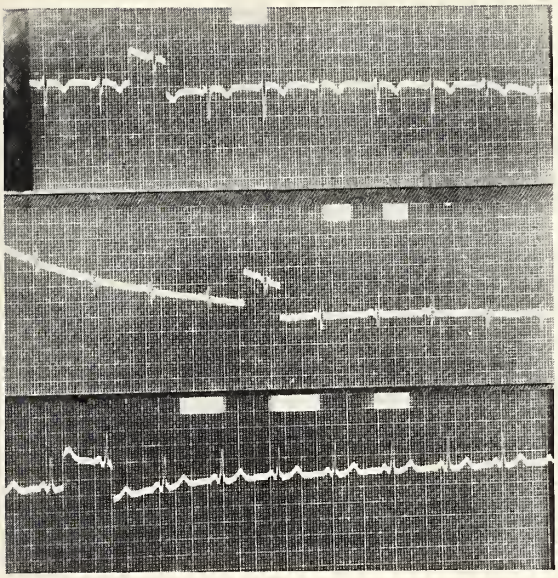


Figure 2.

CASE REPORT

This patient came to my office February 11, 1937, with the chief complaint of sick stomach and constipation. She had occasional headaches and sometimes vomited after the onset of the headache. Family history was negative. She had had measles, mumps and whooping cough in childhood, and in later life had smallpox and influenza. Five years previous to consultation she had neuritis and gallbladder disease. Menses began at the age of twelve years, and were regular, twenty-eight day type, accompanied with headache and cramps. She had been married thirteen years; never was pregnant.

Her present illness began about a week before consultation. The patient was weak, and constant belching was very embarrassing.

Physical examination disclosed a colored female, thirty-five years old. She was 4 feet 8 inches tall; weight, 87 pounds. Well developed. Skin dry, and moles on forehead, nose, chin, and neck. No cyanosis.

Examination of head and neck was negative. Examination of the chest showed lungs to be essentially normal. Apex of the heart was visible in the fifth interspace in the mid-axillary line. Heart sounds were of good quality. No murmurs were present. Blood pressure was 130/90. Abdominal and genito-urinary examinations were negative. Liver was palpable at lower border of left lower rib. Wassermann, Kahn and Kline tests were negative; urinalysis resulted in acid reaction; specific gravity of 1,015; no albumen or sugar.

Special examination by x-ray was made and resulted as follows:

Chest: (See figure 1.) Heart is located on the right side, with base directed to the left, and the apex is in the fifth interspace in the mid-axillary line. The lungs are essentially negative. The diaphragm is higher on the left side than on the right.

Gastro-intestinal: Barium meals were given March 11, 1937, at 8 p. m., and 11:50 p. m., and on the following day at 8 p. m. X-ray picture was made at 9:00 p. m., showing the stomach on the right and the pylorus below the navel emptying on the left and the colon in the lower abdomen with the appendix on the left side.

Electrocardiogram: Shows a complete inversion of all the complexes of lead I (see figure 2). It is as if a normal tracing of lead I had been turned upside down. Lead II resembles a normal lead III, and vice versa. The right and left wires were reversed and the left leg electrode was placed on the right leg. The curves or tracings were then of normal appearance. (See figure 3.)

A diagnosis was made of true congenital dextrocardia with complete transposition of viscera, and visceroptosis.

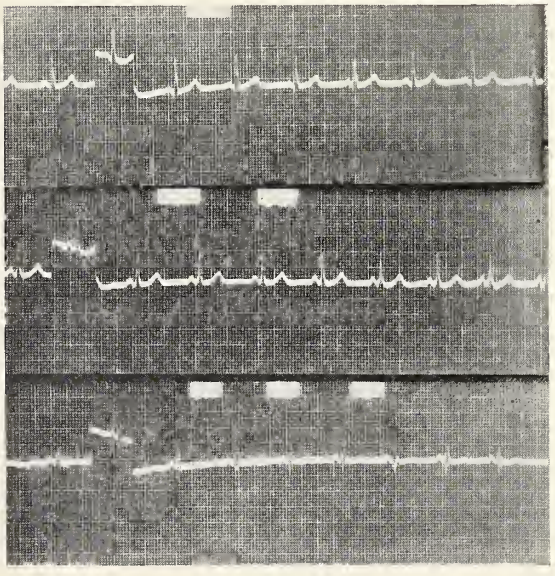


Figure 3.

SUMMARY AND CONCLUSION

This case emphasizes the importance of a thorough physical examination of all patients. Though congenital dextrocardia with complete transposition of the viscera is a rare condition, it generally produces no symptoms and this case follows the rule. The condition of this patient suggests an inversion of the embryo in its relation to its primitive yolk sac.

The electrocardiograph and the x-ray are of prime importance in the diagnosis of such cases. The mirror picture electrocardiogram first indicated the dextrocardia and the x-ray substantiated the findings.

2101 Boulevard Pl.

THE STATUS OF HUMAN PARASITE INFECTIONS IN INDIANA*

WILLIAM HUGH HEADLEE, PH.D.
Lafayette

INTRODUCTION

The question of the status of human parasite infections in Indiana has been one to which there has been found no satisfactory answer. Questions which arise are such as these: Do human beings of Indiana have parasite infections? By what species of parasites might they be parasitized? What is the incidence and intensity of such infections, and are there regions or localities in which these infections are a public health problem?

Until recently it has been considered that parasite infections were common only in the tropical and subtropical regions. This is true only to a limited extent, there being certain species that pass a part of their life cycle in the soil or outside the human host, and cannot well withstand the adverse climatic conditions of the temperate and frigid regions. Such is true of *Strongyloides stercoralis*, and of the hookworms, *Necator americanus* and *Ancylostoma duodenale*. There are other species which are affected to a lesser degree by climatic conditions, and still others which are affected practically not at all by climatic conditions. The pinworm, *Enterobius vermicularis*, the pork worm, *Trichinella spiralis*, and the various species of tapeworms may be mentioned in this latter category. The state of sanitation, of course, has a direct bearing on the extent of most parasite infections. From the standpoint of climatic conditions alone, other factors being equal, we would not expect Indiana to be entirely free from human parasite infections.

In this paper an attempt is made to bring attention to human parasite infections that have been recorded or are known to have been present in Indiana, and on the basis of these records and the records of neighboring regions, to indicate the probable status of human parasite infections in Indiana today. These records are taken from various journals, from correspondence concerning authentic cases, and from the personal records of the writer. Especial attention has been paid to the endoparasites, particularly the intestinal parasites, but instances of infection with ectoparasites have been noted.

HUMAN PARASITIC PROTOZOA

In the literature reviewed, more mention was made of protozoan infections than of infections of metazoa. Malaria received considerable attention. In the earlier papers on malaria, this disease was referred to as a contagious fever, and much doubt was expressed concerning the etiological agent, its presence being attributed to many causes. Papers at this time (Cantrall,[1] 1897, and Pantzer,[2] 1892) dealt primarily with the symptomatology and treatment of the disease. Following the discoveries by Ross and Laveran, the journal discussions centered around accurate diagnosis, treatment, prophylaxis, and epidemiology (Marshall,[3] 1910; Schweitzer,[4] 1911, and Bulson,[5] 1914). Marshall[6] (1914) cites Indiana as being an endemic region of malaria, and the Wabash Valley was styled as "one of the most famous malarial districts of the world." There is still indication that Indiana retains certain endemic centers of malaria.

Earlier papers point out that "summer complaint," or dysentery, was widespread in the state, but apparently there was no differentiation between bacillary and amebic types (Andrew,[7] 1879, and Barcus,[8] 1894). Foxworthy[9] (1917) presented records of the Indiana State Militia that served along the Texas border. One hundred eighty gastro-intestinal cases were noted from July 26 to August 31, the persons being sufficiently ill to warrant excuse from duty. Of these 180 cases, 120 were attributed to diarrhea and dysentery. They were diagnosed only by symptoms, and the exact etiological agent is not known. Bass[10] (1915) in an address before the Indiana State Medical Association, discussed the relation of *Endamœba gingivalis* to alveolar-dental pyorrhea, stating that about 50 per cent of the children are infected by the time they are twelve to fifteen years of age.

Gustafson[11] (1930) says that "generally so little is known concerning the vaginitis caused by the organism *Trichomonas vaginalis* that many cases go unrecognized." He gave an historical account of trichomonas vaginalis vaginitis, a method of diagnosis, and added four case reports to the literature.

* From the Parasitology Laboratory, Department of Biology, Purdue University.

[1] Cantrall, Frances A.: Malarial Fever. Trans. Ind. State Med. Soc., pp. 107,121, 1897.

[2] Pantzer, H. O.: Malarial Intoxication—Rare Cases. Trans., Indiana State Med. Soc., pp. 29-40, 1882.

[3] Marshall, G. D.: Estivo-Autumnal Malaria. *Jour. Ind. State Med. Assoc.*, 3, 191-196, 1910.

[4] Schweitzer, Ada E.: Malaria in Indiana. *Jour. Ind. State Med. Assoe.*, 4, 70-73, 1911.

[5] Bulson, Albert E.: Malaria in Indiana. *Jour. Ind. State Med. Assoc.*, 7, 442, 1914.

Bulson, Albert E.: The Eradication of Hookworm Disease. *Jour. Ind. State Med. Assoe.*, 7, 222, 1914.

[6] Marshall, G. D.: Prevalence and Manifestations of Malaria. *Jour. Ind. State Med. Assoc.*, 7, 402, 1914.

[7] Andrew, Geo. L.: Rational Treatment of Dysentery. Trans., Indiana State Med. Soc., pp. 26-35, 1879.

[8] Barcus, Paul J.: Summer Complaint. Trans., Ind. State Med. Soc., pp. 170-176, 1894.

[9] Foxworthy, F. W.: Gastro-Intestinal Diseases Along the Border. *Jour. Ind. State Med. Assoc.*, 10, 225-232, 1917.

[10] Bass, Charles G.: The Relation of Endamœba Gingivalis to Alveolar-Dental Pyorrhea. *Jour. Ind. State Med. Assoc.*, 8, 455-458, 1915.

[11] Gustafson, Gerald W.: Trichomonas Vaginalis Vaginitis Complicating Pregnancy. *Jour. Ind. State Med. Assoc.*, 23, 81-82.

HELMINTHS

In the review of the literature for the Hoosier State, no records were found concerning the beef, pork or dwarf tapeworms of man. There are, however, certain records concerning the broad fish tapeworm of man in Indiana, a possible endemic center being at South Bend. Case reports and a discussion of the occurrence of this parasite in Indiana have been presented by Lyon[12] (1920, 1926, and 1930), some of these cases being native and not exotic. Dolley[13] (1933) made a preliminary study of the biology of the St. Joseph River in the vicinity of South Bend, finding the first intermediate host of *D. latum* in relative abundance, increasing the probability that the St. Joseph River may serve as a means of dissemination of this parasite in Indiana and Michigan.

Bulson[14] (1912) suggested that one cause of nocturnal enuresis might be the presence of the pinworm, *Enterobius vermicularis*, but no data were given to indicate the incidence of this parasite. The writer has been consulted concerning six unsolicited cases of enterobiasis during the past year, one case being in Indianapolis and five in Lafayette.

Three cases of filariasis, infection with *Filaria bancrofti*, have been reported from Indiana (Lyon[15] 1917) but there is some doubt as to the filarial nature of these infections and to their indigenous origin.

There are several instances of authentic cases of infections in Indiana with *Trichinella spiralis*, the trichina worm (Lyon, personal communication, June, 1936). During the past year, a case in Shelby County, Indiana, was brought to the writer's attention (Inlow[16]).

ARTHROPOD INFECTIONS

Few reports were found concerning arthropod infections, or of diseases of which arthropods may be transmitting agents. Rawles and Ray[17] (1910) reported an epidemic of dermatitis pediculosis ventricosus (grain itch) in the region of Grabill, caused by the grain mite, *Pediculoides ventricosus*.

A case of conjunctival myiasis, due to infection by larvæ of the sheep gadfly *Oestrus ovis*, was reported by Lyon[18] (1935).

One case of Rocky Mountain spotted fever was reported from Terre Haute by LaBier[19] (1925). A girl seven years of age had been bitten by a "black bug" while playing, and a fever developed which, during its clinical course, was typical of Rocky Mountain spotted fever. The lesion from the bite was found behind her ear, but other bugs were not found for further observation and identification.

DISCUSSIONS AND CONCLUSIONS

From the above records we may conclude that there have been and are today certain human parasitic infections in Indiana. The extent or intensity of these infections is not known, due to the fact that detailed studies to obtain this knowledge have not been made. Some reasons for the omission of these studies and apparent lack of interest may be pointed out.

It has already been mentioned that until only recently were we aware that parasites might have a widespread geographical distribution, and might become a public health problem in temperate or frigid regions as well as in the tropical or subtropical regions.

Parasitology is a specialized field and, almost without exception, doctors and practitioners of this region are not trained in the diagnosis of parasitic infections; therefore cases may be overlooked, or the illness may be attributed to other causes. Unless doctors have been trained in tropical medicine, they will not likely have had training in the diagnosis of parasitic diseases. Erroneously, doctors are, many times, of the opinion that parasitic infections can be diagnosed by symptoms, as in the case of other diseases. Such is not true, for in most instances, unless the infection is severe, the disease will be of a chronic nature and rarely causes definite symptoms. Individuals may respond to an infection of the same species of parasite in varied ways. The only accurate method of diagnosis of intestinal parasites is by a microscopic examination of fecal material from the person in question (which examination will reveal the ova of worms and the cysts and the trophozoites of protozoa, if present), and unless a doctor has had this special training, he is not competent in making a diagnosis. A macroscopic examination of human excreta, for the detection of so-called "pathological stools," can only rarely serve to detect intestinal parasites and only in rare cases, when large adult parasites are passed in the excreta, can this method of examination determine the particular species of parasite which is responsible for the infection.

Let us next turn to the status of human para-

[12] Lyon, M. W., Jr.: Infection by the Broad Tapeworm, Diphyllobothrium Latum. *J. A. M. A.*, 74, 655, 1920.

Lyon, M. W., Jr.: Native Case of Infestation by Fish Tapeworm, Diphyllobothrium Latum. *J. A. M. A.*, 86, 264-265, 1926.

Lyon, M. W., Jr.: The Fish Tapeworm and Its Occurrence in Indiana. *Jour. of Ind. State Med. Assoc.*, 23, 72-75, 1930.

[13] Dolley, John S.: Preliminary Notes on the Biology of the St. Joseph River. *Amer. Midland Nat.*, 14, 193-227, 1933.

[14] Bulson, Albert E. (Editor of Journal): Treatment of Nocturnal Enuresis. *Jour. Ind. State Med. Assoc.*, 5, 76, 1912.

[15] Lyon, M. W., Jr.: Filariasis, Report of Two Cases in the District of Columbia, and Analysis of the Cases Reported for Eastern North America. *J. A. M. A.*, 68, 118-119, 1917.

[16] Inlow, H. H.: Personal Communication. April, 1937.

[17] Rawles, Lyman T., and Ray, Herbert A.: Dermatitus Pediculoides Ventricosus. *Jour. Ind. State Med. Assoc.*, 3, 351-354, 1910.

[18] Lyon, M. W., Jr.: Cunjunctival Myiasis. *Amer. J. Opthalmology*, 18, 547-549, 1935.

[19] LaBier, Clarence R.: Rocky Mountain Spotted Fever in Indiana. *Jour. Ind. State Med. Assoc.*, 18, 418-419, 1925.

sitic infections in regions surrounding Indiana, and reflect on the bearing that this has on the probable status of such infections in Indiana. Detailed studies on the epidemiology of the human intestinal roundworm, *Ascaris lumbricoides*, have been made in the southern states, including Kentucky, in which states a considerable incidence of infection was found for this parasite and others (Cort,[20] 1931; Cort and Otto,[21] 1933, and Otto and Cort,[22] 1934). The difference in climatic and other factors between Indiana and Kentucky is not sufficient to assume that these infections do not exist in Indiana, particularly in the southern section of the state. During the winter of 1933, the writer (Headlee,[23] 1935) examined 652 patients of Kankakee State Hospital (Illinois) for helminth infections and found that 11.3 per cent of these persons harbored infections of the pinworm, *Enterobius vermicularis*. These patients were from various localities in the state of Illinois. The epidemic of amebic dysentery in Chicago, during the summer of 1933, clearly indicates that parasitic infections can become a major public health problem in the temperate regions (Bundesen et al.,[24] 1933 and 1934). Riley[25] (1935) made a synoptic report of the parasite infections among children in the Northwestern United States, pointing out that human parasite infections are a real entity in this temperate region.

From the standpoint of the parasites harbored by domestic animals of the state, we may make certain comparisons, and draw conclusions concerning the possibility of the propagation of human parasite infections. The pig ascarid *Ascaris suum* and the human ascarid *Ascaris lumbricoides* are morphologically identical, have the same type of life history, and require identical conditions for propagation. Farmers will verify the statement that pigs of this region have "thumps," or ascaris pneumonitis, and a visit to a packing house where numbers of pigs are slaughtered will further verify this statement. Sanitation alone would account for any difference in incidence of human and porcine ascariasis. Foxworthy[26] (1917) reported a case of ascariasis, presumably from the northern temperate region, and stressed the importance of fecal analysis in order to prevent abnormal operations. The case in question had been diagnosed as having a tumor of the ovary, but on laboratory examination proved to have ascariasis. It was shown by Cable and Headlee[27] (1937) that in certain localities 7 per cent of the rats were infected with *Hymenolepis nana*. This parasite has no intermediate host and the development in rat and in man is identical. It is reasonable to expect that there might be a number of human infections with this species in regions where there are rat infected dwellings. Again, the state of sanitation would prove to be the determining factor. Other instances may be cited, but these will suffice to elucidate the point under discussion.

During the past year 1,200 patients of one of the Indiana state institutions were examined for intestinal parasites, and a considerable incidence of protozoan infections and several cases of helminth infections were discovered. A detailed report of this survey will be reported at a later date. The results of this survey and of a survey that is being made of the students of Purdue University will no doubt furnish us with more definite evidence of the status of human parasite infections in Indiana.

Travel and a change of residence is a factor in the dissemination of parasites that should not be overlooked. Even in a parasite-free locality, endemic areas of parasite infections might be established in this manner. Or, a person from a parasite-free locality visiting a region in which parasites are common could easily acquire an infection. Last January a case of Ascaris infection came to the writer's attention, and it was presumably acquired while visiting a region in the South in which this parasite is common. The person was not aware of the infection until an adult female ascarid was passed spontaneously from the bowel. A microscopic fecal examination did not reveal ova in the stool, indicating that this was the only female worm present, or other worms had not reached maturity. A fecal examination three months later showed that the stool was free of ova, thus leading one to conclude that in some manner a few infective Ascaris ova had been ingested, which resulted in this very light infection, only one worm reaching maturity.

It seems reasonable to believe that Indiana may have a considerable incidence of human parasite infections, particularly in the southern section of the state, but definite proof of this probable condition awaits more detailed studies than have at present been made.

[20] Cort, W. W.: Recent Investigations on the Epidemiology of Human Ascariasis. *Jour. of Parasitology*, 17, 121-144, 1931.

[21] Cort, W. W., and Otto, G. F.: The Ascaris Problem in the United States. *Southern M. J.*, 26, 273-278, 1933.

[22] Cort, W. W., and Otto, G. F.: The Distribution and Epidemiology of Human Ascariasis in the United States. *Amer. J. of Hygiene*, 19, 657-712, 1934.

[23] Headlee, W. H.: Studies on Infections of Human Parasitic Worms Under Institutional Conditions. *Jour. Lab. and Clin. Med.*, 20, 10, 1069-1077, 1935.

[24] Bundesen, H. N., Rawlings, I. D., and Fishbein, W. I.: The Health Hazards of Amebic Dysentery. *J. A. M. A.*, 101, 1636-1639, 1933.

[25] Riley, W. A.: Intestinal Parasites of Children in the Northwest. *Journal—Lancet*, 1935.

[26] Foxworthy, F. W.: Does It Pay to Analyze the Feces? Report of Four Cases. *Indianapolis M. J.*, 20, 416-419, 1917.

[27] Cable, Raymond M., and Headlee, William Hugh: The Incidence of Animal Parasites in the Brown Rat (*Rattus Norvegieus*) in Tippecanoe County, Indiana. *Proc. Ind. Acad. of Sci.*, 1937 (in press).

Collaborator: By a Treatment of Enuresis. *Indpls. Med. Jour.*, 21, 294-295, 1918.

Collaborator: By a Treatment of Enuresis. *Indpls. Med. Jour.*, 21, 563-564, 1918.

CONGO RED IN THE TREATMENT OF CERTAIN INFECTIONS

A PRELIMINARY REPORT

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Septicemia has been described as a febrile condition in which bacteria are constantly present in the blood stream and produce symptoms. In bacteremia, organisms are also present in the blood stream. In either case an organism is causative and the condition may be more accurately described as a symptom complex.

Some investigators have seen fit to differentiate between septicemia and bacteremia on the grounds that in bacteremia the presence of the invading organism in the blood is only temporary, the blood merely acting as a carrier from a focal point of infection and then quickly becoming free from bacteria. In any event bacteria are at some time present in the blood stream and the mortality figures have been extremely high (60 to 80%) in these cases.[1] Treatment consisting of various antisera, protein shock, vaccines and intravenous drugs has been of little use.

A bacterial agent which will kill organisms in the blood stream and at the same time produce no toxic manifestations in the patient has long been sought. During the past two years para-aminobenzene sulfonamide and its related compounds have been added to our therapeutic armamentarium in the treatment of bacterial invasion, more especially in cases of streptococcus hemolyticus and pneumococci type 3. Recently Dees and Colston[2] have reported on its use in specific urethritis.

The results of the use of these compounds in clinical infections, especially those of the blood stream, have been most gratifying according to many observers and Colebrook[3] has reported a number of cases as has Long[4] of this country.

The purpose of this paper is to present Congo red* as a chemotherapeutic agent which, in our experience so far, has yielded striking clinical results.

Congo red is a sulfonic acid dye commonly used as an indicator in titration of acids and alkalies. It is electro-negative and was selected for use because of this fact inasmuch as we believe this property makes the dye bacteriostatic in the presence of organisms carrying an electro-positive charge.

The use of Congo red as an hemostatic agent has been previously described by Bennhold,[5] Nikolajew,[6] Graves[7] and others, but its employment in the treatment of infections by way of the blood stream appears to be new.

Used in a one per cent aqueous solution, it has been found to be of value in the treatment of streptococci viridans septicemia, acute rheumatic fever, erysipelas, pueperal sepsis and infectious arthritis. One case of pneumonia, which unfortunately was not typed, responded promptly.

The dye has been given in intravenous doses of from 20 c.c. to 80 c.c. with very good results in a recent series of cases.

The accompanying table gives in outline form the history and results in ten cases selected at random from a recent series. Although the series of patients who have received the dye is not large enough by any means for accurate statistical analysis based on mortality figures, in every case administration of the dye has been followed by marked clinical improvement.

One patient with pueperal sepsis with a temperature of 105° showed remarkable temporary improvement as shown by a rapid fall in temperature, ability to retain food and to rest, but after fourteen hours, the temperature returned to its former mark and the patient eventually died.

Most constant of the observations regarding the use of the dye has been the rapid lowering of temperatures. Cases of erysipelas, septicemia, acute rheumatic fever and pueperal sepsis with temperatures ranging from 102° to 105° have been lowered dramatically within six to twelve hours to near normal and patients receiving the dye have expressed a feeling of relief within a few minutes after the time of its intravenous injection.

Another constant finding has been that of an increase in both the white and red blood count even in the face of the most virulent streptococcic infections. Within twenty-four hours following the injection of the dye, the white count has been observed to increase as much as ten thousand over the initial count and the red cells are also increased.

Congo red disappears rather rapidly from the blood stream, is stored in the reticulo-endothelial system and has a special affinity for amyloid tissue as shown by Bennhold.[5] No toxic manifestations

[1] Tileston, W.: Septicemia. A Textbook of Medicine. Pp. 71-77, W. B. Saunders Co. Second Edition, 1931.

[2] Dees, J., and Colston, J. A. C.: Sulfonamide in Gonococcus Inf. *J. A. M. A.*, 22 (May 29), 1937.

[3] Colebrook, L., and Kenny, M.: *Lancet*, 1:1297 (June 6), 1937.

[4] Long, P. H., and Bliss, E. A.: Para-Aminobenzene Sulfonamide and Its Derivatives. *J. A. M. A.*, 32 (Jan. 2), 1937.

* Sterile ampoules of Congo red for use in this work were prepared by Dr. K. K. Chen, Eli Lilly Research Laboratories, Indianapolis, Indiana, to whom the author is greatly indebted for his helpful suggestions and his aid in the preparation of this paper.

[5] Bennhold, H.: Excretion of Intravenously Injected Congo Red in Different Diseases, Especially Emyloidosis. *Deutsches. Arch. f. Klin. Med.*, 142:32-46 (March 30), 1923.

[6] Nikolajew, A. P., and Gurewitsch, L. I.: Behandlung der Gynakologischen Blutungen Mit Kongorot. *Zentralbl. f. Gynak.*, 59:2672-2677 (Nov. 9), 1935.

[7] Graves, R. C., and Kickham, C. J. E.: Congo Red for the Control of Bleeding. *New England J. Med.*, 214:782-783 (April 16), 1936.

have been seen with its use, but repeated injections have been observed to cause a dusky red coloring over the entire body of the patient. This disappears within a short time after the dye is discontinued. Extravasation of the dye at the site of the injection causes no ill effects.

CASE REPORT

The following is a case report of proven streptococcus viridans septicemia in which Congo red was used.

Mrs. Z., aged 27, a graduate nurse, complained first of a severe sore throat. Following ten days of local treatment, she developed a middle ear infection. The ear was drained and the patient put on sulfonamide. She was given the drug in varying doses for the next two weeks and at the

Case No.	*Sex*	*Age*	*Diagnosis*	*Intravenous Congo Red*	*Results*	*Discussion*
1	M	36	Infectious arthritis with marked deformity.	Given in 15 and 20 c.c. doses over a period of several weeks on no definite time schedule.	Patient relieved of pain within a few days. Joint motility restored to a remarkable degree in three weeks time.	This patient had been discharged from the hospital as "hopeless." He had been unable to move for weeks and was badly drawn in all extremities. His nails were growing into the palm on one hand. The other was badly deformed. He is now able to care for himself. Limitation of motion is slight.
2	F	27	Erysipelas.	Given daily in 20 c.c. doses for five days.	Temperature dropped from 102.6° to 99° within a few hours. Patient was free from pain in less than one hour. Complete recovery in six days.	Spread of the lesion continued very slowly in this case, but the patient did not complain of pain at any time following the initial dose.
3	F	23	Infectious arthritis.	Given daily in 20 c.c. doses for five days. Then every other day for one week.	Temperature lowered and joint pain relieved after first two doses. Patient completely recovered in two weeks.	
4	M	23	Acute rheumatic fever.	Given in daily doses of 20 c.c. for four days.	Temperature dropped from 103° to normal within twelve hours and all joint symptoms were completely gone at the end of four days.	This patient developed a pancarditis about one week after the joint symptoms had cleared up. He was put back on 20 c.c. doses on alternate days and made a complete recovery.
5	F	27	Strep. Viridans septicemia.	Given daily in 20 c.c. doses for four days.	Temperature dropped to normal within a few hours and patient made a complete recovery.	
6	F	18	Pueperal sepsis.	Given daily in 20 c.c. doses for three days.	Temperature fell from 106° to 99° in twelve hours. Patient recovered.	
7	F	20	Pueperal sepsis.	Given daily in doses of 20 and 40 c.c.	Temperature dropped from 105° to normal within six hours; remained nearly normal for 14 hours and then went back up. Patient died.	This case was treated by another doctor who said, "This girl can't live another twelve hours. Do what you can." The patient lived ten days after that time.
8	M	42	Pneumonia (lobar).	Given in 20 c.c. doses for two days.	Patient comatose and temperature 104° on admission. Patient was rational and temperature was 99.2° within 8 hours. He recovered.	Unfortunately, this case was not typed.
9	F	58	Undulant fever.	Given in 20 c.c. doses over period of two weeks. Not given daily.	Patient obtained almost immediate relief from joint aches and pains. She had no further temperature flare-ups and recovered.	
10	M	54	Rheumatoid arthritis.	Given daily in 20 c.c. doses for one week. Then every other day.	Patient showed marked improvement, but all joint symptoms did not entirely subside.	

end of that time showed a 4-plus albumin, petechial spots over her body and beginning generalized edema. Her temperature was septic from 99° to 103.6°. X-ray examination revealed an acute mastoid. Cultures were taken from the ear and from the blood stream and streptococcus viridans was isolated in pure culture. Hemoglobin at this time was 46% and the white count was dropping daily. Sulfonamide was discontinued. An immediate mastoidectomy was deemed necessary. The operation was performed and within twenty-four hours the patient had developed a cellulitis involving the side of the head, most of the face and neck and extending downward onto the chest. Temperature was 104°. The blood culture was positive for streptococcus viridans. The patient vomited almost continuously and was unable to keep even ice in her mouth. Fluids were maintained by intravenous drip. No hope was held for her recovery. At this stage she was given 20 c.c. of Congo red in a one per cent aqueous solution. Within six hours the temperature had dropped to 99° and within twelve hours the cellulitis had visibly begun to disappear. This dose was repeated daily for four days. On the fourth day the patient was sitting up in bed, temperature free, taking food in liberal amounts. The cellulitis was entirely gone. Blood cultures were negative. Drainage from the operative wound was nil. The dye was discontinued and the patient has remained well.

SUMMARY

(1) Congo red in a one per cent aqueous solution is of value in the treatment of infections, more notably those of the blood stream.

(2) Congo red brings about an almost immediate lowering of temperature and causes an increase in both the white and red blood cell count.

(3) Congo red has been observed to be nontoxic in doses as mentioned in this paper.

(4) In most cases, a dose of 20 c.c. of a one per cent solution, repeated daily, has been found to be sufficient.

Dr. Irvin Abell, president-elect of the American Medical Association, will speak at the annual banquet of the Indiana State Medical Association in French Lick, October 5.

DIARRHEA, DEHYDRATION, AND INTOXICATION*

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Gary

While visiting two teaching hospitals recently, I was surprised to find that the old academic teaching with regard to diarrhea, dehydration, and intoxication was still in force.

According to academic teaching, most diarrheas are considered as fermentative diarrheas, especially when occurring in infants. In considering etiology, we were taught that diarrheas were caused by the migration of bacillus coli into the duodenum, and that the bacillus coli, in this strange environment, fermented the carbohydrate with the resulting production of volatile fatty acids which in turn irritated the bowel and produced a catarrh and, hence, a diarrhea. The principal acid involved is supposed to be acetic acid.

The contents of the duodenum of the newborn are usually sterile. It is true that in the presence of diarrhea we are able to recover bacillus coli from the duodenum. It is also true that bacillus coli will ferment carbohydrate with the production of fatty acids, provided the acidity of the medium is not too high.

If this fermentation theory is correct, our mode of treatment would be to prevent the fermentation by eliminating that part of the diet which is fermentable, or by starving the child. Starvation, of course, would be fatal.

Modern therapy consists of putting the infant on a so-called acid milk mixture, such as butter milk, lactic acid milk, or protein milk. The justification for their use is based upon the fact that all of them have a pH of 4.5, a reaction antagonistic to the viability of colon bacilli. No fermentation will take place in a test tube containing bacillus coli and a glucose culture medium having a pH of 4.5. Therefore, it is assumed that the acidity of these milks prevents the fermentation of the contained carbohydrate by the action of the colon bacilli.

Schiff[1,4] found that in healthy infants the acidity of the duodenal contents in the fasting condition varied between a pH of 6.8 and 7.6; in a case of severe atrophy with diarrhea, where colon bacilli were present in the duodenum, he found an acidity corresponding to a pH of 3.2, while in a case of parenteral diarrhea he found a reaction correspond-

* Presented before the Porter County Medical Society at Valparaiso, April 27, 1937. Material for this paper collected from two lectures delivered by Dr. Erwin Schiff, professor of pediatrics, University of Berlin, at the Bronx Hospital, New York, in September, 1934.

[1] Schiff, Dr. Erwin: Dehydration and Intoxication. Lecture, Bronx Hospital, New York, September 14, 1934.

[2] Schiff, Dr. Erwin: The Therapy of Intoxication and Diarrhea. Lecture, Bronx Hospital, New York, September 21, 1934.

[3] Schiff, Dr. Erwin: Peptone Shock, *Pediatria*, 40-225-229, March, 1932.

[4] Schiff, Dr. Erwin: Das Exsiccose Problem. *Klin. Wchnschr*, 8:1105-1109, June, 1929.

ing to a pH of 7.9. Thus we can readily see that the acidity of the duodenal content varies within wide limits in various cases of diarrhea, many times being high enough to inhibit fermentation. He also found that the reaction in the duodenum is not influenced by the character of the food; that is, whether a sweet milk mixture or an acid mixture is given makes practically no difference, since under all conditions the juice of the duodenum is rendered acid for about two hours after a meal as a result of the passage of hydrochloric acid from the stomach, giving pH values varying between 4.5 and 5. Within a short time, the duodenal content is rendered alkaline again, so that within an hour the original alkalinity is more or less restored.

Schiff's experiments upon dogs with a fistula at the lower end of the duodenum revealed that acid milks produced a greater alkalinity of the duodenal content than did sweet milks. From all these experiments it is quite evident that the acidity of the acid milk in no way explains its better toleration.

The theory that diarrhea results from fermentation was, however, decisively exploded when Schiff was able to show that colon bacilli not only attack carbohydrates, but also protein and protein split products. He also proved that colon bacilli produce volatile fatty acids not only from sugar but also from the peptic split products of milk proteins. Some of us can remember that about ten years ago it was quite popular to use acetic acid or vinegar in the modification of the infant's formula. Probably more acetic acid was given in a twenty-four-hour period than could be produced by the action of colon bacilli on all the carbohydrate of the ingested food, and yet we never produced a diarrhea.

Another academic teaching is that the acidosis which sometimes accompanies a diarrhea is due to the loss of bicarbonate in the watery stools and the accumulation of acids according to the fermentation theory. This explanation can hardly be accepted, because of the fact that we have the same type of acidosis in the absence of diarrhea.

There is a third academic teaching that must be considered, namely that the intoxication following diarrhea might be due to an increased permeability of the intestines. Fukuyama[5] and Hoag proved for all time by painstaking research work that there is no increased permeability of the intestines in dehydration.

The newer views with regard to the etiology and therapy of diarrhea, dehydration and intoxication are based upon the findings in experimental dehydration, as follows:

Schiff produced experimental dehydration by abruptly reducing the intake of water and modifying the diet. He made the remarkable discovery that water loss itself never produced anhydremia or dehydration as long as protein was absent from the diet, while protein in the diet always led to dehydration and intoxication. These experiments were substantiated by the work of Kramar[6]. Three conclusions can be made from the above work: The first conclusion is that the decisive factor in dehydration is not only deficiency of water, but the chief factor is the subsequent disturbance in the intermediary protein metabolism; the second conclusion is that normal intermediary protein metabolism requires a definite quantity of water; and the third conclusion is, in the genesis of clinical intoxication, likewise the disturbance of the intermediary protein metabolism plays the principal role in the acute deficiency of water in the organism.

About this time Mellanby advanced the view that amine intoxication was responsible for the production of intoxication. This view was accepted by Moro[7].

Continuing his work, Schiff proved that bacilli coli produce amines from milk protein as well as they ferment carbohydrates. His work also revealed that both processes, fermentation and putrefaction, are not antagonistic to each other and may occur simultaneously, sometimes the one and sometimes the other prevailing. Volatile fatty acids are formed from milk proteins as well as from carbohydrates by the action of bacilli coli in every normal organism.

Now the question arises: What prevents these fatty acids from causing harm when the organism is in a state of health? It is reasonable to assume that they are neutralized or detoxicated in some manner, but in the presence of acute water loss, this defense mechanism is lost.

The relationship between immune biology and dehydration is interesting. Again we refer to the work of Professor Schiff at the University of Berlin. Over a period of time, 100 healthy dogs were given intravenous injections of pyogenic cocci. No clinical symptoms appeared in these dogs within the first four days after the injection. Sometimes the autopsies revealed microscopically visible abscesses in certain organs as early as twenty-four hours after the injection. For comparison, 100 dogs in a state of experimental dehydration were given the same injections, and all were dead within twenty-four hours after the injections. The most startling revelation was the fact that careful post-mortems revealed no tissue change in any of the organs. Therefore, in the state of dehydration, a superimposed infection may lead to death without leaving the slightest trace of a cellular reaction. Finally, dehydration interferes gravely with the cellular defense processes in the organism.

As students, we wondered why so many children died when the pathologist was unable to show any tissue change. Now we know that these children probably died of an infection while in a state

[5] Fukuyama, M.: Intoxication and Exsiccosis. *Jahrb. f. Kinderh.*, 119-161-179, March, 1928.

[6] Kramar, E.: Intoxication and Exsiccosis, *Jahrb. f. Kinderh.*, 118-94-103, November, 1927.

[7] Moro and Heisler: Apple Diet, *Rev. franc. de* Depiat. 11-637-642, 1935. Also, same, 78-1351, 1928.

of dehydration. Evidently the liver plays an important role in the defense mechanism. Schiff was able to produce fatty hepatic degeneration in young dogs by abrupt reduction of the water intake while feeding the dogs protein. In these fatty livers the glycogen was either greatly reduced or absent. When protein was absent from the diet, with the same reduction in the water intake, fatty degeneration of the liver did not occur. Dr. Rosenbaum verified these results in infants who died from severe diarrhea.

The blood sugar in dehydration and intoxication is normal or increased. This may occur when the liver glycogen is zero. Schiff accounted for this as follows: If an infant is starved for twenty-four hours with a normal intake of water, hypoglycemia will result, showing values as low as 30 mg. of sugar per 100 c.c. of blood. If, in the same infant, the ingestion of water is reduced to 1-12 of the body weight, the fasting hypoglycemia will fail to appear and the inorganic phosphorus in the blood will increase. Further, upon oral ingestion of glucose, the exogenous blood sugar regulation will be disturbed. This leads to the following conclusions: The normal glycemia or hyperglycemia in intoxication is due to the reduction of water in the body; in dehydration, the splitting up of glycogen is increased, and the resynthesis of glycogen, as well as the transportation of sugar from the blood into the tissues, is retarded.

Mautner[8] found that lack of water in the organism inhibits the formation of glycogen.

An outstanding feature of intoxication is acidosis. Schiff found that acidosis always followed experimental dehydration. The alkaline reserve sinks while the hydrogen ion concentration of the blood is normal or increased and the elimination of acids in the urine is increased. There is almost a normal total base in the blood, and a reduction of the base bicarbonate, and an increase in chlorine and lactate, while the phosphoric acid is only slightly increased. The most important finding is the fact that ketonuria is absent and the elimination of ammonia in the urine is not increased in dehydration acidosis, while the elimination of organic acids is increased. The same holds true of the acid-base equilibrium in intoxication in infants. Therefore, the main symptom with regard to the acid-base equilibrium in intoxication and dehydration is the increase of chloride in the blood.

In these cases there is no increase in the output of ammonia, which is supposed to be a classic symptom of acidosis, and is probably due to the fact that in dehydration the ammonia forming function of the kidney is impaired.

After considering the above findings, we assume that in toxicosis the acidosis is due to deficient oxidation and that in reality it is a tissue-acidosis caused by hypo-oxemia.

Schiff was able to produce the same type of acidosis by producing peptone shock in dogs, and he was able to show that the oxygen capacity of the blood is considerably reduced during shock, an effect surely brought about by acidosis. In shock, then, the tissues are insufficiently supplied with oxygen from three causes: first, acute decrease in the quantity of circulating blood; second, owing to an abnormally retarded circulation; and third, because the oxygen capacity of the blood is reduced. In this way anoxemia is brought about and the acidosis as observed in intoxication and in shock is merely the result of this acute anoxemia. In this picture there are two vicious circles set up—first, the anoxemia leads to acidosis which in turn aggravates the anoxemia; second, the acute decrease of water in the body leads to acidosis, which in turn favors dehydration.

Intoxication, then, is nothing more than circulatory shock. If the ability to neutralize toxins is deficient, the source of the toxins is not important. However, in the consideration of diarrhea, dehydration and intoxication, the source of the toxins is evidently the action of the colon-bacillus upon protein.

TREATMENT

What we have to fear and what we wish to prevent in treating a case of diarrhea is the development of dehydration and intoxication. Fat must be eliminated from the diet. If we accept the work of Schiff, protein must also be eliminated from the diet, and carbohydrate remains to be fed.

Additional proof that this is correct is furnished by Warburg[9], who showed that in animals, after fasting twenty-four hours, there was a high hypoglycemia, and a marked glycolysis in the tissues. Rogers proved that liver glycogen is a big factor in resistance. And Elias[10] was able to clear up anhydremia and increased non-protein nitrogen by feeding carbohydrate to his animals.

Schiff proposes the feeding of:

Ringer's solution	300 grams
10 per cent rice jelly	600 "
Glucose	50 or 60 "

This is given in amounts equal to one-sixth of the body weight, but never more than 800 grams per day.

Where no signs of intoxication exist, the above formula is given for two days, and if the progress is favorable, a teaspoonful of zwieback is added to the diet. With additional improvement, a thin potato puree, cooked with sugar and water, replaces one bottle of the formula. Upon further improvement, 50 to 100 grams of fat poor buttermilk is added to the total formula. This is increased until the child is finally receiving equal parts of buttermilk and rice water with 6 per cent added carbohydrates. As soon as possible the child is given the regular diet.

[8] Mautner, H.: Wasserbewegung in Organismus. *Monatschr. Kinderh.*, 41-78-121, 1928.

[9] Warburg, O.: Enzyme Problem and Biological Oxidations. *Bull. Johns Hopkins*, 46-341-358; June, 1930.

[10] Elias, H.: Intoxication. *Wien, Med. Wchnschr.* 82-1546-1549. December 10, 1932.

Up to this point, the treatment of a severe diarrhea is the same as intoxication.

Treatment of Intoxications

The formula is fed until all toxic symptoms have disappeared.

The vascular system must be replenished by the continuous intravenous infusion of Karelitz, using equal parts of 10 percent glucose and Ringer's solution, injecting 20 to 30 c.c. per kilogram of body weight.

Schiff states that this infusion is as efficient as blood transfusion.

Fluids by mouth, however, are most important in combating dehydration.

Vomiting disappears quickly after the infusion, which proves that the vomiting is due to cerebral anemia and not to gastric origin.

The effect of the infusion is astonishing, comatose children becoming bright and clear-eyed within a short time. The dulling of the sensorium is clearly due to deficient circuluation in the brain.

Unfortunately, in severely affected children, the cloudiness may return, and is due to an inability of the circulatory system to retain the fluid. Encephalitis or meningitis or failure of the vessels to retain water may bring death.

The intoxicated patients must be stimulated, or there may be no patient to treat. The best stimulant is 1 10 to 2/10 c.c. of 1-1000 adrenalin given every two hours during the first day, and repeated the second day if necessary.

The acidosis accompanying intoxication does not require special treatment since this is an anoxemic acidosis, and the acidosis will disappear when anoxemia is removed.

The apple diet has been quite effective in the treatment of many cases of diarrhea. However, the results are not uniform, and there is some difficulty in getting the child to take it. There is considerable difference of opinion as to what ingredient of the apple plays the principal role, the malic acid or the pectin, or both. Since the ripe apple is principally carbohydrate, it seems logical that the carbohydrate is the effective constituent of the apple.

Therefore, the fermentation hypothesis as applied to diarrhea, dehydration and intoxication is a thing of the past, and the use of protein milk is not only useless but harmful.

The rationale of carbohydrate therapy in diarrhea, dehydration and intoxication has been supported all over the world. In the United States, Brown[11] and Tisdall advised its use in 1930.

9 West Sixth Avenue.

[11] Brown, Allan,: Etiology of Acute Intestinal Intoxication of Infants. *South. M. J.*, 23:107-112, Feb., 1930.

PRESENT TRENDS IN MEDICAL SOCIETY ACTIVITIES*

JAMES B. MAPLE, M.D.
Sullivan

The essential underlying unit of all medical organization is the county medical society. It lies nearest the body mass of physicians and contacts intimately their immediate and pressing problems. It naturally follows that the better and more active the county society functions the better and more active the entire body medical shall function from the county society at the base up through the state and special societies to the American Medical Association.

The agency through which we must work is the regular county medical society and its programs, not only the programs of its stated meetings but its entire program of activities. The activities of medical societies may be grouped under three heads: social, educational, and economic. Some activities may involve part or all of these phases.

Medical men often are accused of being antisocial, gruff, and ungracious, but we find them inclined to unbend about the banquet table. So it is that most medical meetings have dinner or luncheon served, before, during, or after their educational programs. This period also allows time for friendly chats between members, hasty reports between consultant or surgeon and the family physician and here, too, is where the latest quip or story gets its chance to spread. Of eighty-five meetings checked, we find that sixty were luncheon or dinner meetings.

The programs for medical meetings have been of the same general type for many years. The first medical society meeting in my county was held May 19, 1858, almost eighty years ago, and even then these same three phases were paramount. Meetings then lasted two days with the out-of-town members going home with the local physicians to eat and sleep. Some one of them would give a public address on the evening of the first day at early candlelighting. On the educational side the programs were rather heavy with papers on the therapeutics of such drugs as ergot, veratrum viride, chloral and quinine and on such diseases as typhoid fever, scarlet fever, malaria, erysipelas, menorrhagia and chronic splenitis. Economics occupied their attention for a fee bill was adopted at this first meeting and six years later a very extensive fee bill was adopted and published in the local newspaper.

Medical society programs still cling to this same general pattern, with the emphasis varying a bit from decade to decade. The chief tendency today is to use guest speakers, medical men from other places. The larger societies with large cities and hospitals in their territory use their own men together with the hospital material available for

*Presented at the Secretaries' Conference in Indianapolis, January, 1937.

many of their programs, but even these use guest speakers frequently. I have studied the programs of several counties for the year 1937 and find them to contain no home talent at all. The reports of eighty-five county meetings held in the last three months show that local talent was used in eighteen meetings and guest speakers in sixty-seven. These guest speakers are usually specialists or professors and are able to speak upon their subjects with considerable authority, thus raising both the scientific and practical value of the program. The local speaker who merely compiles what has been written in text books is a thing of the past.

Motion pictures of medical subjects are being used with increasing frequency. In the eighty-five meetings mentioned above, there were fourteen in which motion pictures were used to illustrate the subjects discussed. As fast as satisfactory motion pictures of medical and surgical subjects are produced, their use will become more and more common, adding visual demonstration to the lectures at society meetings. To meet these trends the headquarters office of our Indiana State Medical Association is prepared to assist all of our county societies in securing guest speakers for their meetings and also to furnish information as to where movies may be secured for use in their programs.

One might pause here to prophesy that a few brief years will see the use of television and radio in bringing to our society meetings the clinics of our major hospitals. The synchronizing of the time of meeting of a considerable number of our societies will offer opportunity for extension courses from our medical schools by means of this television so that even the smallest of our societies may have meetings of equal value with the larger ones. Of course, there will go with this the opportunity for the individual physician to subscribe for such service in regular courses of study.

The question of controlled publicity, which will expand our usefulness and also counteract many of the forces now encroaching upon us is one of the projects which should be and often is included in our program for discussion if not for action. Some societies are already opening discussion along this line and here and there active efforts are made to use proper educational measures whereby the public can be reached in entirely ethical ways. Our own State Association's Bureau of Publicity has attained a high position in this work. It supplies speakers for medical and lay organizations, and releases articles for the general press of the state at regular intervals.

The recently organized Bureau of Maternal and Child Welfare of the Indiana State Board of Health is a potentially powerful factor along this line. Its present plans offer little to be criticised and much to be commended. It supplies aid to harassed county medical society program committees by way of speakers and movies for their county society programs. It also offers ethical programs for lay groups under the control of the county secretary and by reputable members of the profession. This is a long and pleasant step from the lecturer and the food faddist with a book for sale.

The use of radio by county and state organizations, where possible, offers a broad field for proper education of the public and for rebuttal against false propaganda. The American Medical Association supplies a regular broadcast service. County societies located where broadcast facilities are available should plan the use of these as a part of their program.

One of the problems facing most county societies is the care of the indigent patient and the patient whose financial stratum is just above the indigent. In the smaller counties this problem is usually handled fairly well by the charitable indulgence of individual physicians and the financial aid of the overseer of the poor. The earning group just above the indigent is taken care of by the physician for the most part with occasional help from the township trustee in catastrophic emergencies, and as the burden is not overly large we are not faced with an unbearable responsibility. In the counties with heavy populations this latter group is a problem which requires attention. Some societies are establishing, as a part of their program, a set up which attempts to determine the ability of this class to pay and to allot this sum among physicians, hospitals, and dentists. Such plans vary, but all try to furnish proper and adequate medical and dental care to the patient under payment plans which can be borne and carried out by the patient. Under such systems many patients, who otherwise would fail to pay anything and might even go without needed services, are able to arrange for the payment of reasonable fees.

The past few years have taught us the necessity of close and effective economic organization if we are to maintain our financial independence. The reports for 1936 show that we have fifteen county societies with a membership of ten or less, thirty with a membership of from eleven to twenty, seventeen with a membership of from twenty-one to thirty, and six with a membership of from thirty-one to thirty-six. Thus of our eighty-one county societies sixty-eight have a membership of thirty-six or less. This is not an unwieldly number and these county groups should lay aside all individual grievances and petty jealousies and work together to maintain financial standards. The medical society in Sullivan county has twenty-one members and includes every active practitioner in the county. We work together with the result that, whereas adjoining counties had their fees for indigent work cut to about one-fourth the normal, we were able to maintain our usual prices for our work throughout the entire depression. All other classes of business are paid regular prices for materials and service and there is no valid reason why the physician should be expected to work for less than his normal charges. Such cutting of physicians' fees carries with it the inference that they are too high and

should be reduced. It also raises this same idea in the mind of your good pay patient with the result that he feels you have overcharged him. If you feel the urge to do charity work for bona fide patients, do it, but make no charge. But when you work for a political unit, remember they pay all others in full, so demand your full and just fees. It is just as much the part of the county medical society program to concern itself with the maintenance of just, proper, and equitable medical fees as it is to prepare educational programs for its meetings. These things should be the problems of the entire medical society rather than of a few men who may be financially independent or infected with socialistic ideas.

One county society this year is establishing a physician's mutual credit association which lists all delinquent patients for the entire county. Such patients are listed as owing unpaid medical bills which are just and which the physician has made reasonable effort to collect. Each physician in the society is given a copy of this list and he is expected to ask cash for all services supplied to patients on this list. The organization of this credit association furnishes punitive power so that patients with limited incomes or slow pay tendencies can be placed on partial payment agreements with some prospect of compelling them to keep up their payments. It effectively stops people who have worn out the patience and trust of one physician from going to another physician in the community and repeating the process until that physician in turn wears out.

Another project that county societies are asked to promote is the compiling of a medical history of each county as their part in the compilation of a state medical history. This should offer an interesting and pleasant hobby for some one in each society who has a bit of literary talent and a heavy endowment of patience. I have recently completed the publication of a small volume covering the complete medical history of my county into which went the most of my spare time for six years. It was intensely interesting and the pursuit of the history and biography in it led me to hunt for facts over most of this country. As a hobby, this research into your local county history ranks with the thrills of antique furniture, old glass, stamps, first editions, or any other of the bugs with which so many of us become bitten. But do not delay the start of this search, for time is fast destroying all trace of our early history.

With the establishment of an intern year before the medical student can become a legalized practitioner, there has arisen the question of the relationship of the medical society and these "lost men" who are neither students nor physicians. One can see no reason why they should not receive a courtesy membership, without dues, in the local county society in which their hospital is situated. This year of pre-actual membership should be valuable in establishing an understanding of society procedures, medical ethics and ideals and keep them from some distressing errors of practice in the years ahead. Young men who become legalized or locate in the latter half of the year may also be given a courtesy membership for the remainder of the year, which membership, of course, carries no journal or malpractice protection. This seems a thoughtful and gracious thing to do for the most of these beginners can ill afford the fee for that short time.

It is probable that the time has come when each society should have a dental section. The prediction is freely made that a few years will see dentistry as a specialty of medicine, with dentists required to be medical graduates. In small communities, the dental men may be given associate membership and attend the regular society meetings with one or more meetings each year devoted to medico-dental topics. The dues may be nominal. In larger centers, it may be possible to have a dental section with its own meetings. At any rate the day has come for a much closer relationship between the medical and dental professions. In my county we have had the dentists as associate members since February, 1916, and their record of attendance is as good as that of the medical men themselves.

Changing times have caused medical men to have increasing contact with legal problems, courts, and lawyers. Compensation laws, personal injury liability cases, questions of sanity, and new types of criminal cases have created the so-called medical expert. Occasional meetings between medical men and attorneys should be arranged to consider these special problems. Occasional programs are arranged by several of the county societies wherein some attorney discusses these legal problems affecting medical men. Sometimes the program discusses the legal rights and privileges of medical men as well as questions concerning malpractice actions. Another subject which appears frequently is the discussion of the legal side of the medical care of the indigent and phases of the social security act as it affects physicians both personally and as practitioners.

In the face of the various economic and social problems which beset us, it is urged that county societies and county secretaries set up as a part of their program this year the earnest effort to secure every medical man in their county as a member of the society. And not only this but to consolidate their gains by trying to bring about a close coordination of the entire group so that we can not only protect ourselves but develop our position to the point where we can offer effective effort in bettering this position. The outlook points to the rise in power of labor and the history of the rise of labor in other countries shows a coincident decline in the relative position of the professions. Medicine has survived even under the worst of these conditions but at a tremendous cost and sacrifice, not only of our own material welfare but to an even

greater degree the loss of effective care of the public health.

You may feel that it cannot happen to us but changes do come and the closer we are organized and the closer we hang together the better we will be able to meet these problems when they do appear. National and state organizations can see and measure the broad sweep of these threatening movements, but it takes the united man power, banded together in the county society unit, to accomplish the purpose of our leaders. The near future may call upon us to fight not only for the maintenance of the high ideals of our profession but we may find ourselves fighting for the right to a comfortable economic existence. Therefore, we feel that the major objective in our society program should be the effective and complete organization of the profession in every county of our nation.

ABSTRACTS

DIAGNOSIS OF GASTRIC CARCINOMA AND PEPTIC ULCER: COMPARATIVE VALUE OF VARIOUS PROCEDURES, WITH ESPECIAL REFERENCE TO GASTRIC ANALYSIS

Cranston Holman, New York (*Journal A. M. A.*, April 24, 1937), performed gastric analyses on ninety patients with peptic ulcer and on sixty-two patients with carcinoma of the stomach in an effort to determine the diagnostic value of a properly performed gastric analysis. The analysis led to a correct diagnosis in 96 per cent of the cases. All the 152 patients either were operated on or came to postmortem examination. All ninety patients with peptic ulcer had a secretion of free hydrochloric acid that fell within normal limits (from 60 to 110 degrees) or were above normal. With five exceptions, the sixty-two patients with cancer of the stomach had a low acidity or anacidity. The diagnosis was correct in a larger percentage of cases when it was based on gastric analysis than when any other single method was relied on. Taking the 152 cases of stomach lesions, both ulcer and carcinoma, as a group, one finds that the clinical diagnosis was correct in 77 per cent of the cases and the roentgenographic diagnosis in 88.2 per cent. The diagnosis made by the surgeon at the operating table by inspection and palpation was correct in 93 per cent of the cases, whereas the diagnosis based on the gastric analysis was correct in approximately 97 per cent of the cases.

SERODIAGNOSTIC TESTS FOR SYPHILIS AS PERFORMED BY THIRTY-NINE STATE LABORATORIES: COMPARATIVE STUDY

In a report of the Committee on Evaluation of Serodiagnostic Tests for Syphilis, Thomas Parran, Washington, D. C., and his associates (*Journal A. M. A.*, Aug. 7, 1937), state that the results achieved in the first evaluation study of serodiagnostic tests for syphilis in the United States reflected great credit on several of the serologists who had developed original methods. It was pointed out in the report of the committee that the actual serologic testing was done under relatively ideal conditions in the laboratories of the originators of the methods and that the results did not necessarily compare with those attained in other laboratories utilizing the same methods. In the second evaluation study, the committee attempted to meet more closely than was possible in the first evaluation project the conditions encountered in ordinary practice. The efficiency of thirty state, municipal or private laboratories in the performance of serodiagnostic tests for syphilis was measured. The results achieved in many of the state and local laboratories were quite comparable with those attained by the originator of the method employed, who tested comparable specimens as a control measure. It was also obvious that the serologic testing in certain state and local laboratories was highly inefficient. These observations led the committee to recommend that the United States Public Health Service make an annual comparison of serodiagnostic tests for syphilis done by all state laboratories. It was further recommended that the state laboratories should in turn offer a similar opportunity for comparative testing to the municipal hospital and private laboratories within each state. It was, however, quite apparent from the results reported by some of the state laboratories that it would be unwise for them to inaugurate a method of control of the local laboratories within their boundaries until they had attained a much higher level of efficiency. In accordance with the recommendations of the committee, the Surgeon General of the United States Public Health Service invited the health officers of the forty-eight states and the District of Columbia to participate in an evaluation study. The invitation was accepted by the health officers of thirty-nine states. A study of the tables and graphs reveals that some of the state laboratories are qualified neither to perform efficient serodiagnostic service nor to inaugurate any system of state licensure or approval of local laboratories within their respective states. On the other hand, it is gratifying to observe that in many of the state laboratories the performance of serodiagnostic tests for syphilis is maintained at a highly efficient level. A study of the technics employed in the serodiagnostic tests for syphilis submitted by the state laboratories reveals that many of them have deviated greatly from the technics described by the originators of the methods. Many of the tests that were designated as Hinton, Kahn, Kline, or Kolmer tests by the performers were so modified that it would be an injustice to the originators of the methods to refer to them as such. The data derived from this investigation indicate that the routine employment of a single serodiagnostic test, although performed by competent workers, is occasionally unreliable. If a single test is used as a routine the laboratory should be prepared and willing to carry out a second test with a different method on request. The extraordinary disparity in the results of this study indicates the urgent need for the provision of intensive and extensive training of personnel in certain of the laboratories. The committee made the following recommendations to state health officers. 1. That provision be made for adequate training of state and local laboratory technicians in the laboratories of the originators of the methods employed in the respective laboratories, and that in the future only thoroughly competent technical personnel be employed. Funds now being made available to the states under the provision of the Social Security Act and allotted for the training of personnel should be utilized for the tuition and stipend of the state and local laboratory technicians. 2. That a system of periodic inspection of state laboratories by thoroughly trained serologists of the United States Public Health Service be inaugurated and made available on the request of state health officers, and that advantage be taken of the system of comparative examination of serodiagnostic tests for syphilis to be extended annually by the United States Public Health Service. 3. That the facilities available for special study of serologic methods in the Veneral Disease Research Laboratory of the United States Public Health Service at Stapleton, Staten Island, New York, be further utilized for the training of personnel from state laboratories. 4. That the need is again emphasized for the development by state laboratories of a system of periodic comparative examination of the performance of serodiagnostic tests by municipal, hospital and private laboratories located within the respective states. 5. That full advantage be taken of existing local laboratory facilities and that provisions be made to approve and subsidize qualified local laboratories for the performance of diagnostic services in the control of syphilis.

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OCTOBER, 1937

EDITORIALS

MOTTLED TEETH

Some time ago we commented on the presence of fluorine in the public water supply of some Indiana communities, mentioning the effect this element had upon the teeth of those who used this water for drinking and household purposes. According to a story in the New York *Times* of recent date, Dr. Margaret Cammack Smith, of the University of Arizona, first directed attention to this in 1931. Since that time various chemists have occupied themselves in trying to devise means of ridding these waters of such an undesirable content, but only recently have their activities met with any degree of success.

Now comes Professor H. V. Smith, of the same school, with the announcement that the desired end has been achieved and that fluorine need no longer be a disturbing factor in certain water supplies, for the remedy is rather easily applicable and is not too expensive.

However, the remedy seems more adaptable for individual home use than for commercial scales. It consists of filtering the water through granulated animal bone, the filtering system being attached to the home water supply. It is found that fluorine has a very definite affinity for bone and will readily leave water to attack that substance. After a rather long usage of the ground bone, it may be renewed by washing with sodium hydroxide, then neutralizing the alkali with dilute hydrochloric acid, after which the bone is thoroughly washed with clean water. It is estimated that the cost of this filtration will be about one-half cent per gallon.

Certain Indiana communities have been facing this problem for some time past. One northern Indiana town, in particular, has been much concerned because its water supply has had a very deleterious effect on the teeth of its citizens. Now it seems that the remedy is at hand and, while there is some little expense attached, the preservation of natural teeth is of such great importance that we believe those involved will be glad to avail themselves of a certain preventive.

OUR SYPHILIS CONTROL PROGRAM

The last two numbers of THE JOURNAL have carried extensive articles on the subjects of syphilis and its control, and particular attention was given to the programs of the committee of the Indiana State Medical Association and of the Indianapolis Medical Society. The September number carried the very capable discussion presented at the First District Medical Society meeting at Evansville when the entire program was devoted to a symposium on the subject. In reality, two issues of THE JOURNAL this year have been, in their scientific sections, almost entirely devoted to this subject, and justification for this has lain in the fact that the problem of syphilis is a large one, of as great importance as any health problem before us today.

The American people are rapidly becoming syphilis-minded. From a subject that was completely taboo in polite circles, syphilis has catapulted to the front pages of the newspapers and has supplied leading articles for lay magazines of all classifications, for it has become a subject of great interest to the public at large. Only the other day we were asked how long the medical profession had known of the prevalence of syphilis, and when the answer was given, the natural question came, "Why have you waited all these years to tell us about it?"

The only possible answer to that question was that, for one reason and another, the American public had not been ready to listen—the way had to be prepared. The story of how the way was prepared is an old one now. Surgeon-general Parran, long-time enemy of syphilis, finally devised ways and means whereby the anti-venereal program could be launched, and launched it was, last November, at a meeting in Chicago.

For some time we were concerned lest Indiana be a laggard in adopting a definite program, but our fears are allayed. We have a program, well planned, which can and will be carried to a definite, purposeful conclusion. Our Association committee is working out a plan that ultimately will be quite satisfactory, a program that will not only carry the message to every corner of the state,

but will point the way to successful completion of that program. Not content with a simple analysis of the syphilis situation in Indiana, this committee proposes to do something about it. The laboratory facilities of the state are being sought out in an effort to determine just what laboratories are prepared to do Wassermanns, Kahns, etc. They want to know, and they will find out, just what the facilities in Indiana are for dark-field examinations, and, finally, they will ask the medical profession of Indiana how well prepared it is to treat this disease.

This problem of syphilis is one of great magnitude. Any disease that is prevalent in ten per cent of the population is indeed a serious problem. If that disease is one which leads to death, or conditions even worse than death, then the problem becomes all the more serious. Perhaps we are inordinately proud of the doings of our State Association, but never within our memory has it failed in any emergency. For a time it looked as though we were at least a bit backward in attacking the program set out for us, and we must admit having written some rather plain words about the matter, but now we are satisfied in the knowledge that syphilis is all but on the way out in Indiana. Optimistic? Yes! Syphilis can be controlled; syphilis can be eradicated. Once a medical group sets the machinery in motion, it will be only a matter of years until the desired end is reached.

If any member is not wholly familiar with what is being done by Indiana physicians in this anti-syphilis campaign, they are asked to read the August and September issues of The Journal. By all means, read every word of the symposium presented at Evansville, published in the September issue. When reading it, give due attention to the address of Judge John W. Spencer, of Evansville, who speaks from a viewpoint gained through hearing cases that have come before him in his judicial capacity. He is an observing man, and he has acquired an amazing knowledge of the economic phases of the syphilis problem. He offers many valuable suggestions which our various officers and committees will gladly consider.

Syphilis is on the way out of Indiana. The question of syphilis and what to do about it is being attacked in an orderly, intelligent manner which we confidently believe will result in completely conquering the disease.

CHAIN STORE OPTICIANS

For some months past, Indiana physicians have been receiving cards from an undisclosed source, carrying messages something like this:

> Wanted: Indiana licensed physicians; full time position; salary forty dollars per week. If interested, write, phone, or wire John Doe, address below.

These cards came from Chicago, Fort Wayne, Gary, and Indianapolis. The writer of this editorial has received three such cards during the past year, the third one coming from a West Washington street address in Indianapolis. Each of the cards was answered by letter, but the first two brought no response. The letter to the Indianapolis address, however, was answered, probably because the letter stated that the writer would be in that city within a few days and might be interested enough to call and talk it over. Within a day or so a telegram was received from one signing himself E. V. Reed, asking the physician to call, which he did.

The address was found to be in the Claypool Hotel building, and the windows and door bore the name "The National Optical Stores." (To our knowledge, this company has retail stores in Hammond, Gary, and Fort Wayne, in addition to the one in the capital city.) Upon entering the store, the inquiring physician was advised that Mr. Reed was in charge, and after a few moments he came forward. Apparently sparring for time enough to look us over, he went right to the point. He wanted an Indiana physician to work in the Hammond store, salary to be forty dollars per week, with "other perquisites," which we took to be commissions on sales above a stated amount per week. The physician was to do "trial case refractions," meaning that he would do nothing more than try to select lenses that would enable the customer to see better than with the normal eyes. When asked about the use of "drops," the manager declared that it was against the policy of the company. Asked if the National Optical Stores was a Ritholtz outfit, he readily answered in the affirmative. Among other things, the manager explained that the physician would not have anything to do with making any sales of glasses, for a store manager would attend to those details. Further, one of their Chicago experts, a regular physician, but one not licensed in Indiana, would come out for a week or two to teach the physician the methods employed by the company. He then asked the physician if he ever had done any refractions, and when the physician said that he had, the manager said, "That's fine, but it makes no difference whether you have or have not done this work; our Chicago expert will teach you just what we want you to do."

The physician asked a lot of questions about the operation of the places, and once the store manager paused to remark that the questions were rather frank, but that he liked to talk that way. At this juncture, he said that the physician was just the sort of man the organization wanted, and mentioned a smart step-up in the salary offered. About this time the doctor working in the place stepped out of his little booth to announce to Mr. Reed that the customer needed no change in glasses, whereupon Mr. Reed took the man in

charge and, while cleaning his glasses, remarked that the frame did not fit and should be exchanged. The man demurred and Reed took another tack, remarking that the drill holes in the upper outer edge of the lenses (which evidently had been used as rimless glasses prior to being put in the present frames, and the holes were well out of the visual line) were detrimental and the lenses should be discarded. However, the "prospect" walked out without purchasing new glasses.

Resuming conversation with the physician, Reed stated that a man was needed in the Hammond office on the following Monday, and he felt that the physician would fill the bill most admirably. The physician stalled a bit at this, and Reed again raised the ante, declaring that he would get in bad with the head of the company, but that they needed just such a man as the inquiring physician. (Before the interview was ended, another salary increase was offered!) Finally, the physician walked out, promising that the store manager would hear from him soon. The physician went back to the headquarters office of the Indiana State Medical Association and wrote a letter to Mr. Reed to the effect that the physician had decided to return to Hammond and continue his practice as an ophthalmologist along with his work as editor of THE JOURNAL.

Much more might be written concerning observations made while in the place, but the above will suffice to give a very clear picture as to what goes on in such shops. It is certain that "trial case" refractions are simply that and nothing more. Rare is the case wherein a hurried "examination" of that sort results in much benefit to the customer, particularly when the examiner is a man without previous experience and whose training consists of an enlightenment as to the methods of the outfit as taught by one of their Chicago "experts."

The Indiana State Board of Medical Registration and Examination some years ago revoked the licenses of certain Indiana physicians for lending themselves to the illegal practice of medicine by those not licensed. It would seem that the present law, either medical or optometry, provides a similar remedy. We commend the reading of this editorial by members of both boards.

TOO MUCH IS ENOUGH!

A paragraph in the annual report of the Executive Committee very justly decries the organization and maintenance of what is termed "extraneous societies." By that they refer to "academies" and what-not, organized in communities which already have a county medical society unit. We have discussed this with various groups over a period of years, and some of them argue that there is no such thing as competition in these instances, but we cannot agree with such statements, for the most essential unit of all medical organization is the county medical society — the very backbone of organized medicine. Without the county unit, there could be no functioning state medical association; this, in turn, means there would be no national medical association. If neither of the major organizations were in existence, Medicine itself would indeed be in a sorry plight.

Referring to "competition" again, even the staff meetings now so generally required in all major hospitals are active competitors of our county medical units. Proof of this may be had from any physician who is a member of his county medical society and a member of the staffs of one or more hospitals. He will tell you that there are too many medical societies, that he can afford time for but few of the meetings. Most hospital staff rules have a compulsory attendance feature, which means that if one is to maintain an active staff membership, he must attend a certain per cent of the meetings. The average physician likes to have a few free evenings, hence he sees to it that his attendance at medical meetings is put on a budget basis. Now, if we add to these another society, say an academy of medicine, the picture is further complicated. The average physician can afford just about so much time in the preparation of papers, perhaps one each year, which is a rather high average. If he presents the paper before an "academy"—and the name is high-sounding—he has no time to prepare an additional paper for his county society which becomes the loser.

The Executive Committee is altogether right in its declaration. If there were no county medical units, we dare say that there would be few academies, or other medical organizations, for that matter.

LAKE MICHIGAN POLLUTION

One of the most beautiful bodies of water in the Central West, Lake Michigan, long the source of water supply for millions of people, seems about to come into its own again as the result of a far-reaching pronouncement of the Indiana State Board of Health to the effect that, after January 1, 1939, all pollution from domestic and factory sewage must end. This, of course, applies only to such portions of Lake Michigan as lie within the domain of our state, the well known "loop" at the southern end of the lake.

For many years, communities situated in this area have poured their raw sewage into the lake, and it was only a comparatively short time ago that the great City of Chicago was doing the same thing. Then, reversing the flow of the Chicago River and creating the drainage canal, Chicago sewage went elsewhere. In northern Indiana, however, this water pollution went on unhindered

except for a few desultory steps taken to prevent industrial wastes of certain sorts to be discharged untreated into the lake.

Now comes the order from the Indiana State Board of Health, an order that bears the mark of finality, demanding that these Indiana municipalities at once take steps to get their houses in order within the next fifteen months.

We are strongly in favor of such a move, and our only regret is that it has been so long in coming. For the past several years we have preached this very thing and the preaching was born of a long familiarity with a most deplorable situation. We have seen a great section of the southern end of Lake Michigan converted into a cess pool. Where once we had great delight in providing our table with the ever-present yellow perch, with an occasional herring or white-fish from these waters, we now studiously avoid all personal contact with these same waters. Streams flowing into the lake, once the home of some of the fightin'est bass we ever have known, together with some big pickerel, now are sluggish ponds, filthy with human and industrial wastes.

The Grand Calumet River, euphonious in name and villainous in odor, once flowing through several northern Indiana cities, now has become a slough with little or no current, and it is being used by a population of several hundred thousands of people as a depository for their wastes which are untreated in any way. Millions of gallons of water from these sources find their way into Lake Michigan, there to be generously mixed with the water supply of these people. Therefore, our reason for being in full accord with the recent order of the Board of Health in regard to sewage disposal. Just how the change is to be brought about is another problem. Like most cities, the communities affected are sorely tried to find ways and means of carrying on at the present time, so that the necessity of finding several millions of dollars within the next few months and putting these millions to work in the creation of acceptable sewage disposal plants becomes quite a problem. Some of our mayors are suggesting the all too common method of increasing taxation at a time when most of us already are over tax conscious. Another, adopting a plan used elsewhere, talks of a "usage tax," this tax, or rental, being based upon the use made of the local sewage system by both householder and manufacturer alike. When this latter plan was first suggested, it aroused quite a bit of humorous comment. However, it is not a far cry from a rental charge, or tax, for water connections to one's home, and so why not a similar charge for the convenience of a sewer?

It is not within our province to determine just how this thing shall be done. The actual doing if it becomes the main problem, but ours is the duty of seeing to it that conservation of health goes forward, even as it has been fostered by our profession for hundreds of years in the past.

"SHADOW ON THE LAND"

It is not often that we make editorial mention of a book, but Dr. Thomas Parran's book on syphilis, entiled "Shadow on the Land," contains much of importance to the medical profession because it expresses the public health attitude of one of our foremost health authorities and government officials. One can sense the new frontiers of medicine and the ever-changing borders of public health medicine and private practice. He defines the whole public health program which consists of alertness along the entire front of preventive medicine to make sure that the ground gained is held, that gains made are consolidated, and that there is a concentrated attack upon the sectors where the greatest saving of human life can be made. It is for this reason that he considers syphilis "the most urgent public health problem in this country today."

In surveying the prevalence of syphilis, Dr. Parran finds it greatest in the under-privileged Negro of the deep South (200 per 1,000), and lowest in isolated rural communities. An average of 4.8 per cent exists in industrial plants. About 500,000 new cases develop each year. It is four times as prevalent in cities as in the rural districts and six times as prevalent in Negroes as in whites. He mentions the war-time control and the reasons for its failure.

One of the most interesting parts of the book deals with the Scandinavian experience. There has been a decrease from 4,307 cases in 1919 in Denmark to 648 cases in 1933. He attributes this to the control methods and follow-up system in use. While syphilis has dropped, gonorrhea totals remain at a high level, showing that the sex habits have not changed. In Great Britain the results in syphilis control have been less spectacular—a drop of 55% in fifteen years. There the central government bears 75% of the cost of syphilis control. Treatment is free to all; it is plentiful, good, and convenient, but not compulsory. The official attitude is that skillful treatment and considerate handling of patients are more important than epidemiological methods. There is no reporting as in the Scandinavian countries. Twenty per cent of the cases are treated privately in Great Britain, 15% are treated privately in Scandinavia, while 60% are treated privately in the U. S. A. In Germany, compulsion of treatment is the outstanding factor. The French rely on personal prophylaxis and supervised prostitution. In general, syphilis has declined only when active government intervention entered.

Dr. Parran discusses the contemporary scene in our large cities and many states. "In eleven states (Indiana mentioned) syphilis still seems taboo, since none of the federal funds were allotted specifically for its control—though several of these have 'planned comprehensive programs.'" Also, "In nine states (Indiana included) the tests are

limited to indigents. In none of the nine is the diagnosis of tuberculosis limited to indigents . . . Still less do they look at the lining of the sick man's pocketbook before they diagnose his meningitis, scarlet fever, or typhoid . . . Their constitutional responsibility to detect communicable disease and protect citizens against it, is not fulfilled." Dr. Parran says that like the rest of our syphilis control machinery, the laboratory service of the country, public and private, needs a thorough overhauling. The state laboratories are urged through a system of licensing or other control to check performance of all laboratories.

A chapter on "Syphilis and the Job" will be of interest to all industrial concerns. When syphilis is discovered in an employee, he should be treated and not fired. Dr. Parran is awake to the evils of prostitution and favors repression rather than regulation. He emphasizes moral prophylaxis. He bemoans the politics and incompetency found in some health departments and is aware of a small group of doctors who profiteer on syphilis in private. Further he states, "Principle thoroughly established in American government is that health and physical welfare of the people is a responsibility of the government." Whenever services directly promoting this end are shown too costly for the individual to procure for himself, such services by long tradition are rendered through public action whether state or local, whether service is preventive in nature or involves treatment of the individual. He urges a middle way which would avoid the evils of regimented medicine. "If, however, the needs now served through public action are supplied in the future through private and voluntary action, a corresponding part of the present contribution of government of the health of the people will be quickly abandoned. If private charity and united professional enterprise fail to provide for all the protection of medical science, it is inevitable that such protection will be demanded from the state and to a greater degree than most of us, whose business it is to administer health functions, believe to be wise or necessary."

Dr. Parran's platform for action consists of preventing congenital syphilis by taking blood tests on every pregnant woman and on applicants for marriage licenses and insurance policies. Report cases; the name need not be reported—serial numbers or initials may be used. Obtain public funds which assure adequate treatment for all infected cases. Educate the doctor and the public. Use postgraduate courses. Run down contacts. Each state should have a syphilis committee and a full-time health officer with an adequate staff in charge of venereal diseases. Diagnostic laboratory service and consultation of specialists should be easily available. Treatment must be made available for all the people, particularly the under-privileged and the underpaid. The program must not be too centralized but must be pliable enough to fit local conditions.

EDITORIAL NOTES

A bill is before the Colorado legislature providing for sterilization of all defendants who plead insanity and gain their point when charged with murder or sex crimes. It looks good to this editor. —*Nebraska State Medical Journal.*

That rather intriguing comment in the September JOURNAL relative to the annual stag smoker has us on the *qui vive.* While we always have liked little surprises, this has set us wondering. Is it possible that the plans include another "badger fight," such as used to delight us in the days gone by? At any rate, we plan to be there early that evening, so that we will miss nothing.

We are glad that so many of you liked the September number of THE JOURNAL, and your compliments have justified our pride in that issue. In addition to the comments from our own folk, which we prize most highly, are numerous complimentary letters from outside of the state, some from those who know a good journal when they see one.

Among the annual reports that attract our attention each year is that of the Necrology Committee. There is much information in the report if carefully prepared—much that one can think about. This year's report was prepared by Dr. James B. Maple, of Sullivan, who has gone to no little trouble in its formation. The record of heart cases is especially interesting (this probably is due to our age). As usual, heart diseases head the list of causes of death among Indiana physicians during the past year.

The editor of *Minnesota Medicine* calls attention to the numerous accidents that occur in the home, particularly in the bathroom. The dangers of slipping on wet porcelain are equalled by the dangerous porcelain handles on faucets and shower fixtures. Porcelain handles, we will admit, are more beautiful, but metal handles are unbreakable and will not cause injuries to the palm that frequently result in permanent deformities. A rubber mat to be placed in the bath tub will prevent slipping, and there should be no electric plugs within reach of the bath tub as fatal accidents have occurred when wet hands have tried to connect or disconnect electrical appliances.

Hoosier state parks, long popular with Indiana folks and with those from outside the state as well, have come in for their share of patronage the past summer season. A tabulation of attendance at these playgrounds during the past summer shows a remarkable increase. It is, of course, to be expected that this would be the case since our state has done a very good job of providing recreational centers for its residents and for its host of visitors who traverse our state each year. While commenting on this subject, we may say that fishing in Indiana, some time ago deemed to be on the way out, has again come into its own. Our waters, such of them as have not been polluted to the extent of driving all living things from them, are again restocked and are providing rare sport for the devotees of the rod and reel. We are quite proud of Indiana's Conservation Department.

"Physicians studying in Vienna send warning to America against socialized or 'state medicine.' They say the sick fund physician is always in a hurry. He has to handle too many patients in a day to give proper attention to them all. And the interposition of a bureau administered by politicians between the patient and his doctor tends to destroy the personal confidence in the physician which is so great an aid to recovery. There are other disadvantages besides these, but for the most part springing out of these basic causes. There is a tendency of late to attain hospital facilities over here by insurance methods. Most of this is very good, giving hospital care to many people who would otherwise go without it. A little more advance along this line can doubtless be taken without any harm. But a line has to be drawn. Medicine must not be bureaucratized."—The Evansville *Courier*, Aug. 10, 1937.

George Dillinger advises that pre-convention registration is unusually heavy, but that more and more can be accommodated. If you have not made your reservation, if you have not planned to attend, better get going right now. We know few reasonable excuses for any live, active Hoosier physician absenting himself from such a meeting. A review of the programs for a good many years discloses none that will equal the program for the French Lick session. There is "home talent" in profusion, with just enough of the foreign atmosphere to make it especially tempting. And do not overlook the vacation features of this year's convention, for where will you find a little vacation spot, as readily accessible and as appealing as French Lick? Most any place in southern Indiana is worth a little visit, but French Lick is out of the ordinary. Its physical comforts are all that one could desire, and its natural setting is one of Nature's most beautiful spots. You have three more days in which to decide to join your confreres in three or four days of enjoyment. We say three or four because we believe it is well to get down there a day or so ahead of the regularly scheduled program. The "welcome" sign will be hung out a week or more before the festivities are formally opened.

Last summer we mentioned the use of salt tablets in our northern Indiana mills and factories, these tablets being used by the employees to offset the effects of extreme heat. These tablets, of from seven to ten grains each, were placed about the plants and the employees were encouraged to use them from time to time during the day. During the extreme heat and humidity of the past few weeks it was found that there was an enormous increase in the use of these tablets, the men having learned that salt does have the happy faculty of "stepping-up" energy when under the strain of intense heat.

In certain of our mills the old-time gum drops have been added to the regimen with much success. While the salt replaces that valuable element, much of which is lost in perspiration, the gum drops seem to help in maintaining the proper sugar balance. One enterprising pharmaceutical house has brought out an innovation, combining seven parts of salt and three parts of dextrose in the manufacture of tablets for use in these plants.

Speaking of gum drops, quite some time ago we noted in a confectioners' journal the statement that South Bend, Indiana, was the greatest consumer of gum drops, per capita, in the United States.

Traffic accidents in Indiana show no signs of decreasing. In fact, recent tabulations indicate a rather marked step-up in these often preventable happenings. The situation has become such that numerous drivers now are using trains for other than local travel. One prominent Indianapolis surgeon recently telephoned to a county society secretary, saying that he would come to the meeting via train rather than by motor car, even though he employs a professional chauffeur. He explained that a short time ago he had been called to a northern Indiana point to look after several Indianapolis folk who were injured in a motor car accident, one of the victims being killed, and the surgeon remarked that that was enough for him, and that henceforth his goings over the state would be done by train. Indiana does not differ from other sections of the country for on

a recent trip East, we talked with two or three officials, all interested in traffic over our highways, and each stated that motor car travel becomes more hazardous each year. Hundreds, yes thousands, of suggestions have been made with the idea of solving this nation-wide problem, but none seems to have met with success. The whole matter revolves about the personal equation. Laws are made and laws are changed, but none of them seems to have taken into consideration the personal element. Omitting the drunken drivers, and they are all too common, the use of ordinary common sense will do much to lessen the enormous toll of human lives now being annually exacted by this modern Juggernaut, the automotive vehicle.

What a fine thing it would be if some philanthropically inclined individual would endow an organization to deal with medical quackery! Recently we were told that the small sum of three thousand dollars per year might enable an organization to investigate and ferret out all medical quackery in Indiana, and the continuance of that sum would make it possible to keep Indiana free of quacks and medical frauds of every description. We sincerely hope that someone will see the need and make such an endowment. How many lives could be saved and how much money conserved through such an agency!

George H. Simmons, M.D., editor and general manager emeritus of *The Journal of the American Medical Association* died September 1 in a Chicago hospital, several days following an operation. Dr. Simmons was eighty-five years old. English born, Dr. Simmons came to the United States at the age of eighteen and attended Iowa and Nebraska schools and received his M.D. degree from the Hahnemann Medical College in Chicago, and the same degree from Rush Medical College a few years later, following additional study. He practiced medicine in Lincoln, Nebraska, for a few years and established the *Western Medical Review*, acting as its editor. He held various positions in the journalistic field. He filled the position of general secretary for the American Medical Association from 1899 to 1911, and of editor until 1924. In 1901 he was made general manager of *The Journal of the American Medical Association*. Dr. Simmons was responsible for the beginning of publication of a quarterly cumulative index of leading medical publications as a means of providing physicians with the latest information regarding references to medical periodical literature in an easily accessible form. The success of this publication was so great that it eventually was combined with the *Index Medicus* into the *Quarterly Cumulative Index Medicus*. *Hygeia*, too, was initiated under Dr. Simmons' leadership. To tell the story of Dr. Simmons' services in the period from 1899 to 1924 is, in fact, to tell the history of the American Medical Association in that same period. In 1924 he resigned as editor and general manager of the American Medical Association and became editor and general manager emeritus. He was undoubtedly the greatest factor in his generation in the development of the American Medical Association and the profession that it represents.

The Indiana State Board of Health, in executive session on September 20, 1937, considered in detail the report of the syphilis committee of the Indiana State Medical Association, and particular attention was given to the item regarding a change in the Wassermann card which is used by the State Board of Health laboratory at the present time. A resolution was passed which changes the card so that there is no reference made to the indigency of the patient but leaves that part of it to the discretion of the physician who sends in the specimen. The reverse side of the card carries the notation (without the signature of the physician) that "It is understood that this patient is unable to pay for laboratory service." Thus the matter is left to the judgment of the individual physician. At a future meeting of the Board, other items in the committee's report will be considered, and the recommendation that cases be reported by number instead of by name will be acted upon. All this is further proof of the fact that Indiana is determined to wage a successful war against syphilis.

The September twenty-fifth issue of *The Journal of the American Medical Association* contains numerous articles on sulfanilamide and the results to be expected from its use. As is usual with any new drug, untoward results are beginning to reach the medical publications only after the drug has gained considerable popularity. In the case of sulfanilamide, its value is too well established to permit any decrease in its use because of slightly toxic manifestations following its administration; however, physicians who use the drug should acquaint themselves with the reactions to be expected and use it with greater caution. Sulfanilamide apparently is not entirely without toxic manifestations, and patients who are given the dye sometimes complain of dizziness, anorexia, nausea and vomiting. Anemia has been noted following continued use of the dye, and a case of toxic optic neuritis resulting from sulfanilamide is reported. Skin eruptions are not unusual but clear rapidly upon discontinuation of the drug. The toxic effects of sulfanilamide are yet to be evaluated, but in the meantime it is in the interest of good medical practice for every physician who prescribes sulfanilamide to do so with proper consideration for possible after effects.

Program
SKEET AND TRAP SHOOT

At French Lick — October 4, 1937

Morning — 10:00 o'clock

50—Skeet Targets—Men.
Trophy to—1st High Score.
2nd High Score.
3d High Score.

25—Skeet Targets—Ladies.
Trophy to High.

Buffet Luncheon, 12:00 o'clock at Skeet and Trap Club House.



Phil Miller, instructor at French Lick.

Afternoon — 1:00 o'clock

50—16-yard Targets.
3 Classes, According to Ability.
A—92% and above.
B—85% to 92%.
C—84% and under.
Trophy—1st each class.

50—Handicap Targets—16 to 25 yards.
Handicap to be determined by score made on first 50 targets as follows:

50 x 50	25 yards
49 x 50	24 yards
48 x 50	23 yards
47 x 50	22 yards
46 x 50	21 yards
45 x 50	20 yards
44 x 50	19 yards
43 x 50	18 yards
42 x 50	17 yards
41 x 50 or under	16 yards

Trophy—1st High Score.
2nd High Score.
3d High Score.

Hotel Rates for the French Lick Convention

French Lick Springs Hotel

600 rooms.

Single rooms with bath—$9 per day.

Double rooms with twin beds and bath—$7 per day per person.

Single rooms with lavatory and toilet—$7 per day.

Double rooms with lavatory and toilet—$6 per day per person.

Double rooms with hot and cold running water—$5 per day per person. (45 rooms available.)

Rates include all meals and special convention banquet. Charges will be divided into quarter days so there will be no charges for anything not actually received.

Homestead Hotel, West Baden Springs

50 rooms.

European plan hotel, located about 1 mile from convention headquarters.

Single room with bath—$2.50.

Single room without bath—$1.50.

Double room with bath—$4 and $5.

Double room without bath—$2.50 to $4.

Rooms

There are several excellent rooming houses and rooms in private homes are available, with rates starting from $1.

The State Pediatric Society will hold a dinner meeting at French Lick with Dr. Joseph Brennemann, of Chicago, as guest. The exact time will be announced at French Lick.

We'll be

seeing you

at

French Lick!

MENTAL HYGIENE PROGRAM FOR INDIGENT CHILDREN IN INDIANA

The mental hygiene program to take care of indigent children in Indiana has been put into effect under the supervision of the Bureau of Maternal and Child Health of the Indiana State Board of Health and the Indiana University School of Medicine with the approval of the Executive Committee and the Committee on Mental Health of the Indiana State Medical Association. Dr. Exie Welsch, a native of Benton County, Indiana, who has specialized in psychiatry at Johns Hopkins University for the past five years, has been appointed head of the division of Mental Hygiene of the Indiana State Board of Health. Dr. Welsch will give her full time services to the program. The program is to be carried out in each locality only with the cooperation of the local county medical society. Details of the program follow.

PROPOSAL

To establish a *demonstration* in the State of Indiana under the direction of the Bureau of Maternal and Child Health of the Indiana State Board of Health, of a mental hygiene program for the indigent children of Indiana.

NEEDS FOR A PROGRAM

1. With the exception of the cities of Fort Wayne, South Bend, and Indianapolis, there are no provisions or places for referring or examining these types of cases in this state. In most of the above mentioned cities, this type of work is conducted as a part of the school or educational program.

2. To date there exists no provision in the curriculum of Indiana University School of Medicine for teaching students the problems of child psychiatry. Therefore, this most important branch of pediatrics is little understood or practiced by the majority of the medical profession of the State of Indiana.

3. In the Children's Clinic of the Riley Hospital there exists no qualified person to deal with the problems of child psychiatry. Thus far no funds have been available for the establishment of a department of child psychiatry.

4. Throughout the State of Indiana, the Indiana State Welfare Department has under its care a number of dependent and homeless children. Many of these children present mental hygiene problems which the State Welfare Department is unable to have diagnosed, and treatment outlined. This problem has especially presented itself to the Indiana State Department of Public Welfare in dealing with the placement of dependent and homeless children, who heretofore have been housed in orphanages and like institutions.

5. With the exception of the larger cities mentioned in Paragraph 1, teachers in smaller communities and in the rural areas have no access to guidance along problems of child mental hygiene.

OUTLINE OF PLAN

Preliminary contact has been made, and recommendations received from Exie Welsch, M.D., a graduate of Indiana University School of Medicine, and who has for the past five years specialized in child psychiatry at Johns Hopkins University, and was formerly with the Child Guidance Clinic of Philadelphia, Pennsylvania. Doctor Welsch has been appointed to direct this new division, and organization plans have been formulated in cooperation with the Director of the Bureau of Maternal and Child Health of the Indiana State Board of Health; Miss Mildred Arnold, Director of the Children's Division of the Indiana State Welfare Department; W. D. Gatch, M.D., Dean of Indiana University School of Medicine; Max Bahr, M.D., Chairman of the Neuropsychiatric Section; Matthew Winters, M.D., Chairman of the Pediatric Section, Indiana University School of Medicine, and State Chairman of the American Academy of Pediatrics; Mr. Floyd I. McMurray, Director of the Indiana State Department of Public Instruction; the Liaison Committee of the Bureau of Maternal and Child Health, and the Committee on Mental Hygiene of the Indiana State Medical Association.

The detailed program in each locality is to be carried out in close cooperation with the county medical societies in the locality involved.

The duties of the Director of the Division of Child Psychiatry are to set up a working plan with the State Welfare Department for organization of a mental hygiene program for the care of their dependent children. Agreement has already been established between the Director of the Bureau of Maternal and Child Health and the Director of the Children's Division of the State Welfare Department, which provides for assistance of social service workers and the cooperation of a trained psychologist. A psychologist has been employed by the State Welfare Department to assist Dr. Welsch.

The salaries and expenses for these above mentioned assistants are to be provided by the Indiana State Welfare Department. These workers are to work under the supervision and in cooperation with the Director of the Division of Child Psychiatry of the Indiana State Board of Health.

The activities of the above mentioned group for the present are to be confined to three demonstration areas. In these counties, namely, Jay, Sullivan, and Morgan, the Children's Division of the Indiana State Welfare Department now has

located their three demonstration centers. The proposed child psychiatrist is to work with and limit her activities and cooperate with the State Welfare Department in these definite areas.

Through cooperation and agreement with the authorities of the Riley Hospital for Children, and the Pediatric Department of Indiana University School of Medicine, Department of Neuropsychiatry, it is proposed that this new director be assigned a certain number of hours for clinical teaching of child psychiatry to medical students, as a part of the pediatric curriculum. This clinical teaching would perhaps be limited to an hour lecture given for twelve weeks during the junior and senior years.

Provision has also been made for the child psychiatrist to conduct a one-day clinic each week, such clinic to be housed in the out-patient department, and all equipment furnished by the Riley Hospital and the Department of Pediatrics of Indiana University School of Medicine. This clinic will work in cooperation with the already established Department of Child Psychology. Children eligible to this clinic will be those cases who are admitted to the Riley Hospital Out-Patient Clinic under the general rules of admission of such patients as established by that institution. In brief, these admissions are made by commitment of the judge of any county, and therefore make available consultation services where child psychiatry problems are found, as necessarily arise in the counties throughout the State of Indiana.

Agreement has also been made with the State Department of Public Instruction that this new director and her staff will be available for consultation services to the school authorities in the above mentioned demonstration areas.

Likewise, in these demonstration areas, consultation services will be available to licensed practitioners for cases who otherwise can not afford consultation services of a private psychiatrist.

SUMMARY

It is believed that the above proposal will provide a greatly needed service for the children of the State of Indiana, since trained individuals in this type of work are not available in Indiana, and since teaching of this subject has been generally agreed as being lacking in the Department of Pediatrics of Indiana University School of Medicine.

This proposal has been presented to various members of the State Pediatric Society, the Dean and the departmental heads of Indiana University School of Medicine; the Mental Hygiene Committee and the Executive Committee of the Indiana State Medical Association; the Superintendent of the State Department of Public Instruction; the Director of the Children's Division of the State Department of Public Welfare, and it has met with unanimous approval.

STATE FAIR

At the Indiana State Fair, the week of September 4-10, 1937, the Indiana State Medical Association in collaboration with the American Medical Association, demonstrated pictures of the effects of burns, and the means of preventing burns, and a series of illuminated pictures showing how eye injuries are caused and how they can be prevented. A series of posters on nutrition were exhibited, emphasizing the need for adequate diets in vitamins to maintain health.

As in former years, a test was made for the people. This year the tests were vision tests, and were chiefly for children of school age, although adults were tested, too. The instruments used for checking the eyes were telebinocular stereoscopes, with which the children could be checked in four to five minutes, and told whether they should have a more thorough eye examination at the hands of an oculist. The test included a check for mono or binocular vision, fusion of images properly at far and near distances, visual acuity, vertical imbalance, lateral imbalance, stereopsis, and astigmatism. During the Fair week, 453 people had their eyes tested, most of them being children.

With the instruments used, it was found that the great majority of children of school age require aid for their eyes. Their need for help varied considerably. Some were greatly handicapped, unknown to their parents, and others had only slightly impaired vision. All of those individuals who failed to pass the test properly were given slips on which were checked those tests in which they passed or failed or were doubtful. These individuals were advised to have a more thorough eye examination by a competent physician or oculist.

The interest manifested in the exhibit this year equalled that of former years, and many requests for pamphlets on diet and nutrition were received. The instruments used for checking vision were in constant use as long as they were set up.

Mr. Ewing of the Keystone Company was present to answer technical questions on the usage and construction of the instruments. The tests were given by Mr. Ewing, and by Ray Miller and Gus Peters, medical students. Members of the Committee on State Fair are:

R. A. Sage, *Chairman*, Indianapolis,
J. W. Gibbs, Danville,
C. A. Reid, Indianapolis,
J. E. Ferrell, Fortville,
C. H. Jinks, Indianapolis,
W. A. Shuck, Madison,
W. M. Dugan, Indianapolis,
T. B. Rice, Indianapolis.

LEGION JOINS BATTLE AGAINST SYPHILIS

H. J. NORTON, M.D., Chairman

American Legion 40 and 8 Child Welfare Committee for Indiana

Columbus

The American Legion maintains as one of its major activities a Child Welfare program which comprehensively covers the entire field of welfare for children. This work is administered by a Child Welfare Committee for the state comprised of the chairmen of the child welfare committees of each of the subsidiary organizations. The Forty and Eight as its part of this program is assigned disease prevention work, and its chairman is responsible to the American Legion of Indiana for the carrying out of this work. This phase of Legion activity is of particular interest to the profession.

Both the Legion and our organization actively concern themselves with matters of public interest and welfare and the preservation of American standards of community and national life. There are very few doctors who are eligible who are not members of the American Legion. It is apparent thus that both organizations have much in common and great opportunity for mutual helpfulness. The writer has held the chairmanship responsible for this disease prevention work for the past two years and has, as a member of both organizations, made every effort to forward the cordial relations between the two organizations. In all matters of policy and procedure, the directing officers of the State Medical Association, as well as those of the Indiana State Board of Health, have been consulted, and no action has been sponsored that did not have the full approval and cooperation of these organizations. The disease prevention work has been largely concerned with diphtheria immunization, with the aim being to expand its scope as seems advisable. It consists of two phases: first, education of the public to the desirability of this work by approved propaganda and by example; second, by actual immunization campaigns carried out by local Legion posts, of which there are over 340 in the state, for the benefit of under-privileged children after a plan worked out with the approval and active cooperation of their county medical society. At present a series of articles prepared by the Division of Child and Maternal Welfare and approved by proper medical authority are being distributed through the Legion Posts to all newspapers in the state, dealing with the subject of disease prevention from an educational standpoint, for their publication. From the professional point of view, the tenor of all this activity has been and is to keep things the American way and away from any trend toward state medicine: "See your family doctor." It has been common experience in these local campaigns to find that a larger number of children reach their family physician for immunization, as a result of the interest stimulated, than are done gratuitously. As well, a review of mortality statistics over the past few years shows definite reduction in diphtheria deaths. It is expected to continue this work and expand it as may be indicated.

Resolution Passed by Indiana American Legion and Forty and Eight

WHEREAS, the present statutes are inadequate for the protection of the public in controlling the spread of venereal disease, and

WHEREAS, physicians, public health officials and many civic organizations under the direction of the United States Public Health Service are promoting a campaign to eradicate syphilis from the United States, and

WHEREAS, congenital syphilis — that is, syphilis inherited in the new born from the parents—is one of the most tragic results of the disease,

THEREFORE, Be It Resolved, that the Department of Indiana American Legion sponsor the passage of a law at the next session of the Indiana General Assembly, making it mandatory that Wassermann and any other necessary blood tests be given, and the findings must be satisfactory before a marriage license may be obtained.

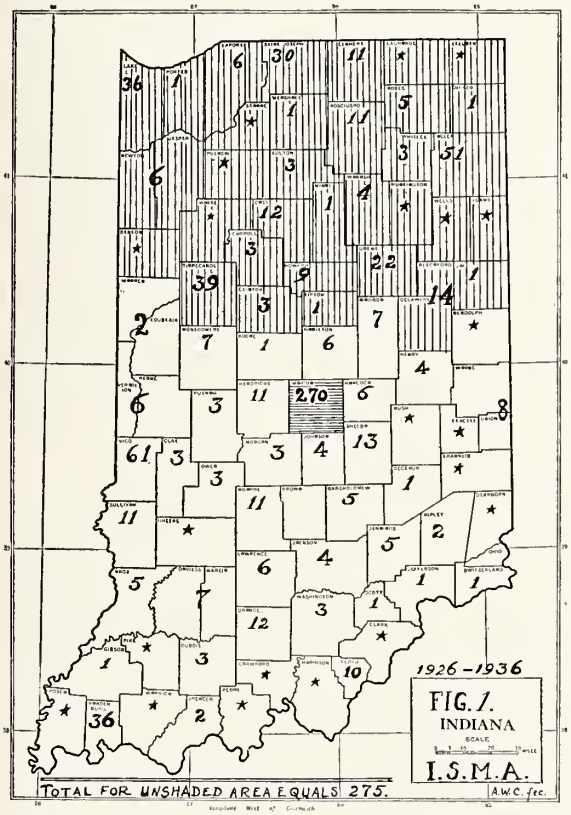
During the past few months, increasing interest has been shown in Legion circles in the program for control and prevention of venereal diseases. This sentiment was crystallized in the following resolutions drawn up by Dr. Cassel Tucker and the writer. These were presented to the recent state convention of the American Legion and the Forty and Eight, and were passed by both organizations without opposition. The resolution indorsing the national program was sent on to the National Legion convention for its consideration.

It is thus desired to call to the attention of the Association the cordial liaison that exists between the two organizations, and its opportunities for mutual helpfulness in a common cause.

APPOINTEES OF THE INDIANA STATE MEDICAL ASSOCIATION*

* This study was undertaken at the request of the Executive Committee.

The subject under scrutiny is the distribution of appointments to committees of the Indiana State Medical Association over the eleven-year period of 1926 to 1936, inclusive. The accompanying maps have been compiled from data assembled by the office of the Executive Secretary of the Association. Thus, the Arabic numbers on the maps represent the actual number of appointees for the organizational units indicated during the period mentioned. Elective officers are not included.



In considering the map by county societies (Fig. 1) it is noted that 22 are starred as having supplied no appointees at all in the eleven years preceding January 1, 1937. By district societies, however (Fig. 2), these inequalities are less marked, and it is interesting to note that the total number of appointees for the six districts north of latitude 40 degrees is 297; for the Seventh District, alone, 288; and for the remaining six, south of latitude 40, 234. In other words, the six northern districts averaged just under six per year, or slightly less than one per district per year more than the six southern districts. The Seventh District, being at the heart and center of Hoosier medical life, naturally has a high number of appointees, with a yearly level fluctuating from 18 (in 1926) to 41 (in 1936).

In no county has there been a steady increase or decrease, all showing alternate fluctuations. No attempt has been made to determine the true cause for this, but the explanation which leaps first to the mind is variation in degree of local interest in State Association affairs. Furthermore, it seems likely that the total lack of appointments in 22 counties is due largely to their own inertia toward state doings rather than to animosity on the part of the powers-that-have-been over a period of eleven years. (The statistician while flying thus far over the field of speculation, rather than remaining in the corral of factual data, hopes he has not injured the sensibilities of anyone.)

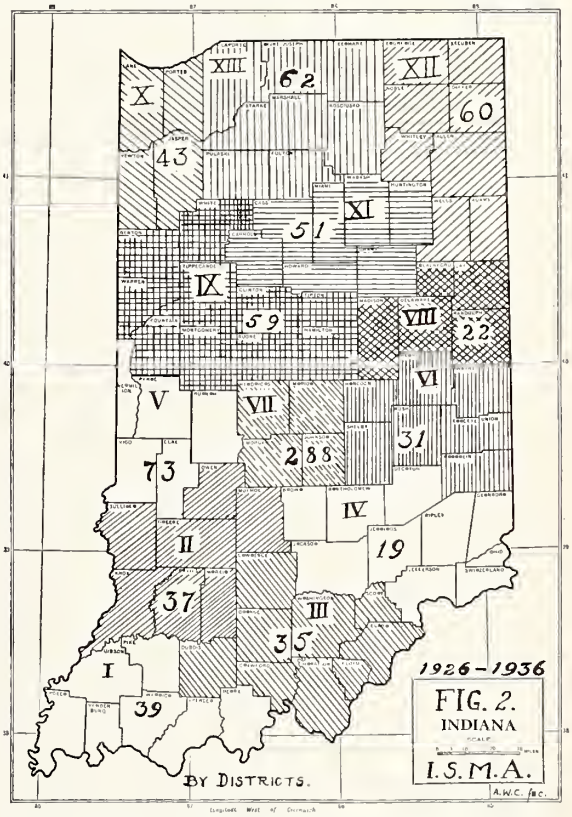


Figure 1 is shaded to show the geographical result of a division by approximate thirds of the total number of appointees regardless of district lines. This idea was suggested by the fact that Marion County lacks only three of having exactly one-third of the total.

Further than this, it is felt that the figures should be allowed to speak for themselves—let the chips fall where they may.

Respectfully submitted,

A. W. Cavins, M.D., *Statistician.*

INDIANA MEDICAL HISTORY

THE CONSTITUTION AND BY-LAWS OF THE OGDEN MEDICAL ASSOCIATION OF HENRY COUNTY, INDIANA

Seventy-nine years comprise an extremely brief period of time, yet within the years since 1858 astounding changes have taken place in the cultural relations of the medical profession to its social milieu which itself, to be sure, has undergone tremendous change. No experience brings this fact home to one as vividly as does the examination of some old document which embodies the deepest thoughts and attitudes of those who lived and worked in a social situation so different from ours as to appear almost like a pastoral scene of Ancient Greece. Just such a document is the "Constitution and By Laws of the Ogden Medical Association of Henry County, Indiana." It was printed at the *Courier* office in Newcastle, Indiana, in 1858, together with "The Code of Ethics of the American Medical Association," adopted in May, 1847. A copy of the booklet has been presented to the Indiana State Medical Association by Dr. George Wiggins, secretary of the Henry County Medical Society, and the Bureau of Publicity of the Indiana State Medical Association will see that the brochure is carefully preserved along with the other too-few relics of the early days of medical history in Indiana.

Some of the articles of the constitution are worthy of quotation, for they reflect the earnestness of the medical community, the right-mindedness of their attitudes toward the lay public, and the general conditions of practice.

"Art. II.—Its object shall be, to promote the acquisition of medical knowledge, by encouraging observation, and comparing the experience of its members in the several departments of the science."

"Art. VIII. — A candidate to be eligible to membership, must be a graduate of a regular medical school, or a practising physician, eligible to graduate in such school by attending one course of lectures; in which case, if recommended by the Censors, and voted for by two-thirds of the members present, he may become a member by enroling his name and paying an initiation fee of one dollar."

"Art. IX.—The meetings of the Association shall be held at Ogden, Indiana, and shall consist of four stated meetings in each year, with adjournments from time to time as the interests of the Association may require."

"Art. X.—The first stated meeting will be held on the first Monday in April, 1858, and so on quarterly, for the purpose of embodying the reports of the cases of disease treated by the members during the preceding quarter, and this subject shall be pursued without delay until the said report is completed and adopted; a fair copy of which shall be preserved by the Association from year to year."

"Art. XIII.—This Association shall meet the first Monday in each month for the purpose of reporting cases, and each member will be required to report one case in detail, treated by himself."

"Art. XII.—It shall be the duty of each member of (the) Association, to keep a faithful record of each case of disease which he treats, noting the age, sex, and condition of the patient, the cause, where obvious, the type, symptoms, treatment, duration and termination of the disease, and where practicable, the post-mortem appearances; the material facts of which record, he shall embody in an intelligible form and present to the Association, at each quarterly meeting. And the Association shall have access to the case-books of the members whenever called for."

CONSTITUTION

AND

BY-LAWS

OF THE

Ogden Medical Association,

OF

HENRY COUNTY, IND.;

TOGETHER WITH THE CODE OF ETHICS

OF THE

AMERICAN MEDICAL ASSOCIATION.

PRINTED AT THE COURIER OFFICE, NEWCASTLE

1858.

"Art. XIV.—Each member shall also keep a faithful record of his obstetric practice, embracing all the facts that are calculated to throw light upon the numerous difficult problems connected with the function of reproduction, a copy of which he shall present to the Association at each quarterly meeting."

Of the "By Laws," the following are thought to be of special interest:

"Art. 3.—The members of this Association shall be governed by the '*American Code of Medical Ethics.*'"

"Art. 4.—Each member shall attend all the meetings of the Association, or be subject to a fine, at the discretion of the Association, in any sum not to exceed three dollars."

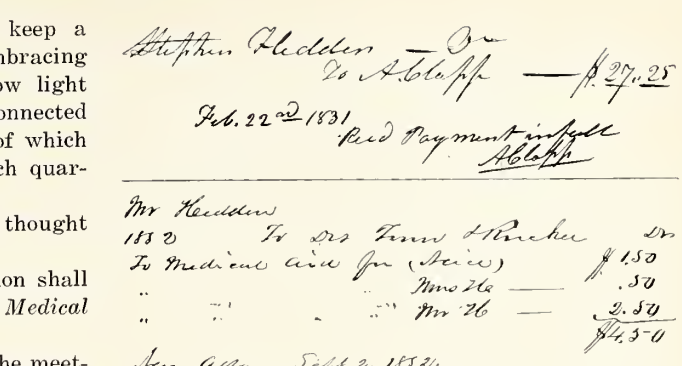
"Art. 5.—The President, as provided in the constitution, failing to perform said duty, shall pay into the treasury one dollar."

"Art. 11.—There shall be a Standing Committee of Ethics, whose duty it shall be to hear all complaints of breach of etiquette, or violation of medical ethics; which shall decide all questions of ethics submitted to it. If any member shall be charged in writing with any violation of the provisions of the constitution or by-laws, or with unprofessional conduct, a copy of such charge shall be furnished him; himself and his accuser cited to appear before the committee, when it shall proceed to hear the case, reserving its decision to be reported to the Association, when its action may be affirmed by a vote of a majority of the members present."

The Constitution and By-Laws were signed by John Lewis and H. M. Crouse as a committee, and by thirteen other men. It would thus appear that the Association was formed by fifteen charter members.

After the By-Laws, the pamphlet contains a fee-bill which had been submitted by a committee headed by John Lewis, and apparently accepted by the Association. Readers will probably get a greater reaction out of reading these items if they bear in mind that these services were rendered without benefit of hospital, x-rays, or trained nurses. And if any lay reader of this article should be over-impressed by the fees stipulated, let him suspend his judgment until he make inquiry as to the cost of upkeep of a horse and gig and as to the taxes in Henry County in 1858.

Town business, visit and medicine during the day	$ .75
Town business, visit and medicine during the night	1.00
Country, one mile and under during the day	1.25
Country, two miles and under during the day	1.50
Country, three miles and under during the day	2.00
Country, four miles and under during the day	2.50
For each additional mile	.50
Night riding, fifty per cent added.	
When detained longer than ordinary, an additional charge.	
Obstetrical fee in town, and within four miles of town, in ordinary cases, mileage at discretion of practioner	5.00
Preternatural cases	10.00



Receipts dated 1831 and 1852—one with the rarely found signature of Dr. A. Clapp.

Instrumental, from	$10.00 to 20.00
Additional charge when detained.	
Consultation fee	5.00
Prescription and medicine at office, owing to kind and quality of medicine	50c to 1.00
Surgery—Visit and dressing ordinary flesh wound, in town	$1.00 to 2.00
Opening abscess	50c to 1.00
Reduction of simple cases of luxation	5.00
Reducing luxation of head of femur and humerus	$10.00 to 20.00
Reducing simple fracture	5.00
Reducing fracture of head of femur and olecranon	10.00
Taxis hernia	5.00
Operation for strangulated hernia	$20.00 to 50.00
Trephining	20.00
Amputation of fingers and toes	5.00
Amputation of arm	$10.00 to 20.00
Amputation of leg	25.00
Amputation of thigh	40.00
Amputation of shoulder joint	75.00
Comminuted compound fracture of luxation	$10.00 to 20.00

With this fee-bill, the part of the pamphlet pertaining particularly to the Ogden Medical Association comes to an end. The remaining sixteen pages consist of a copy of the Code of Ethics of the American Medical Association, which also deserves re-publication in The Journal, not only because of a quality of quaintness in the diction employed at that time, but as a reminder that the profession's current code of ethics is not something just recently conceived.

One might be inclined to wonder how the members of the Ogden Medical Association could find the time to keep the case records required by their constitution, and especially to prepare the reports of all their cases for the Association's archives. It is probably not an explanation to say that case histories were necessarily shorter than they are now, for lack of the numerous laboratory examinations in vogue today. In that day, a different set of details occupied the studious physician. It seems that a better answer is that life was simpler, without the multiplicity of staff meetings, committee engagements, professional journals, and business intricacies such as State and National Income Tax reports, etc., etc. The "horse and buggy days" of medical practice were unquestionably arduous in some respects, but they had their compensating advantages!

A PROPOSED STUDY OF INFANT AND MATERNAL MORTALITY IN INDIANA

The Liaison Committee of the Indiana State Medical Association, cooperating with the Indiana State Board of Health, is preparing to make a study to determine the causative factors which contribute to maternal and natal mortality in Indiana. Through this study it is hoped to determine the means of reducing the maternal and natal mortality rate in Indiana.

The following recommendations were proposed by this committee and submitted to the Executive Committee of the Indiana State Medical Association at their meeting held on Sunday, September 19, 1937, and received the endorsement of this committee.

"That statistical data for the State of Indiana on puerperal and natal mortality may be accumulated for the purpose of determining the cause and a possible cure therefor, the undersigned committee recommends:

"1. That such data be gathered by the Indiana State Bureau of Vital Statistics of the Indiana State Board of Health.

"2. That a questionnaire, requesting particulars, be sent by the Indiana State Board of Health to the attending physician reporting a maternal or new-born infant death.

"3. That the County Secretary of Health or other duly authorized health official, be requested to interview the doctor and fill in questionnaire if doctor fails to return same after ten days.

"4. That a committee consisting of members of the Indiana State Medical Association be appointed by the State Board of Health to meet every three months to review and reclassify above statistics and determine, if possible, responsibility and disposing factors of said deaths.

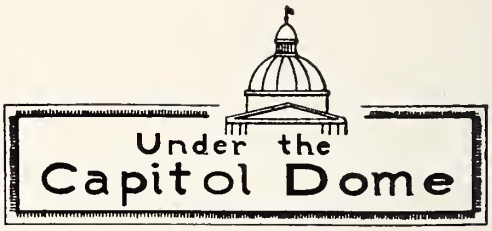
"5. That said committee use questionnaire provided by the State Board of Vital Statistics for such purposes.

"6. That a letter be forwarded from the office of the Secretary of the Indiana State Medical Association to each doctor who has attended a maternal or natal death; this letter to be sent several days prior to the questionnaire and requesting his cooperation in this attempt.

"7. That such data be published annually in the Indiana State Medical JOURNAL."

It is hoped that each physician will cooperate with the committee by filling out the blanks which will be forwarded by the Bureau of Vital Statistics of the Indiana State Board of Health for each maternal or natal death which is reported. Thus, the individual physician will unite with the Indiana State Board of Health and the Indiana State Medical Association in an effort to improve the mortality rate of mothers and new-born children. This study is new to Indiana, but has been carried on in eight other states with a resulting improvement in mortality rates.

Committee:
E. O. ASHER, M.D.,
J. C. CARTER, M.D.,
H. F. BECKMAN, M.D.,
R. W. SHANKS, M.D.



STATE BOARD OF MEDICAL REGISTRATION AND EXAMINATION

Due to changes and reappointments by Governor M. Clifford Townsend, the state board of medical registration and examination held a reorganization meeting in offices of the board at the statehouse on September 15.

The present personnel of the board is as follows: president, L. C. Sammons, M.D., of Shelbyville; vice-president, D. O. Peterson, D.O., of LaPorte; secretary, J. W. Bowers, M.D., of Fort Wayne; treasurer, Will C. Moore, M.D., of Muncie; members, N. E. Harold, M.D., of Indianapolis, and H. K. McIlroy, D.C., of Indianapolis, and Ruth V. Kirk, executive secretary.

Retiring members of the board are: William R. Davidson, M.D., of Evansville; F. S. Crockett, M.D., of Lafayette, and C. J. VanTilburg, D.C., of Indianapolis.

There is one vacancy on the board to be filled by Governor Townsend.

LICENSED TO PRACTICE

List of candidates who received licenses in August to practice in Indiana as the result of examinations conducted last June has been announced by the state board of medical registration and examination.

Those who received licenses are:

Auerman, Chas. J.	Brown, K. H.
Bailey, Noel R.	Burnett, A. B.
Baum, Harry	Caseley, D. J.
Berman, Sol	Clark, L. E.
Bernstein, Joseph	Coffel, M. H.
Bixler, L. C.	Cohn, W. L.
Bloemker, E. F.	Compton, W. A.
Bloom, Asa W.	Culbertson, Jr. C. S.
Bloomer, R. S.	Cuthbert, Marvin P.
Borough, L. D.	Dalton, Naomi L.
Brody, Arthur	Dick, Jr., Fred

DuBois, R. B.
Eisterhold, J. A.
Engeler, J. E.
Erickson, L. G.
Ericson, H. L.
Errico, Frank J.
Fender, A. H.
Fleischer, J. C.
Fowler, H. M.
Fuelling, J. L.
Funkhouser, J. B.
Gill, D. D.
Griswold, W. R.
Grosso, W. G.
Hart, W. D.
Harter, E. B.
Henderson, R. A.
Hewitt, M. I.
Higgins, K. E.
Hilbish, T. F
Hill, H. D.
Hillis, L. J.
Hurst, Cecil
Husted, R. G.
Hutto, W. H.
Johnson, F. D.
Johnson, T. W.
Kennedy, H. F.
Kennington, D. J.
Larmore, J. L.
Larmore, Sarah H.
Lashley, D. L.
Lichtenberg, M.
Loudermilk, J. L.
McCoy, G. A.
McMahan, H. G.
Mansfield, M. R.
Marcovich, A. W.
Marks, H. H.
Mendelsberg, S. B.
Meyer, H. A.
Michaelis, S. C.
Miller, Jr., Hugh A.
Miller, L. C.
Miller, R. C.
Miller, R. J.
Mitchell, Ralston S.
Modjeski, R. J.
Moore, H. T.
Neidballa, E. G.
Norris, Mary A.
Oppenheimer, E.
Patzer, R.
Pentecost, P. S.
Preston, W. A.
Ramage, W. F.
Reynolds, R. P.
Romberger, Jr., F. T.
Rosenberg, Meyer
Rotman, H. G.
Royster, R. A.
Scales, A. B.
Scott, F. M.
Scott, I. H.
Sheek, K. I.
Sims, J. L.
Smithson, Jr., R. A.
Somers, G. H.
Spalding, J. J.
Spears, J. K.
Spencer, F.
Stevens, S. L.
Stewart, J. H.
Strang, W. C.
Strange, M. B.
Swan, R. C.
Thegze, G.
Tilcy, G. A.
Tischer, E. P.
Topolgus, J. N.
Trantor, W. F.
Tucker, W. S.
Vandivier, R. M.
Voorhis, C. C.
Washburn, R. N.
Williams, Jr., F. M.
Williams, R. H.
Wilson, O. R.
Witus, C.
Wolfe, Ralph V.
Wood, W. H.
Woods, H. C.

James D. Sturgis has assumed duties as legal counsel for the Indiana State Board of Health. Mr. Sturgis was assistant attorney general and later deputy attorney general. He remains a member of the staff of the attorney general's department and retains his title as deputy attorney general. Mr. Sturgis has quarters in room 11, state house annex.

Mr. Sturgis holds a Bachelor of Science degree from Marion Normal College and a Bachelor of Law degree from Indiana University Law School. Previous to his appointment as attorney general, he was engaged in private practice of law in Fort Wayne.

VOICE OF THE DOCTOR

SPEAKERS FOR DISTRICT SOCIETIES

To the Editor:

I was very much interested in the article which appeared in the August issue of the Journal of the Indiana State Medical Association under the column "The Voice of the Doctor." This article should be well taken by the district medical societies, as the Committee on Post Graduate Education of the Indiana State Medical Association, cooperating with the Bureau of Maternal and Child Health of the Indiana State Board of Health, has endeavored to interest the district medical societies in this type of scientifice program.

As stated in the above mentioned article, many district societies have heretofore lacked funds for bringing available speakers to their centers for local postgraduate instruction. It is the purpose of this letter again to call to the attention of the officers of the district societies that programs can be arranged and financed for them. This can be done through the existing cooperation of the Committee on Post Graduate Education cooperating with and through the Bureau of Maternal and Child Health of the Indiana State Board of Health.

The types of programs sponsored by this method can be obtained by referring to the April issue of the Journal of the Indiana State Medical Association, which carried the programs of several districts which were sponsored by the combined efforts of these groups. It is hoped that these same districts and others will avail themselves of this opportunity.

Very sincerely yours,
Howard B. Mettel, M.D., Chief,
Bureau of Maternal and Child Health,
Indiana State Board of Health.

A CASE OF ABDOMINAL PREGNANCY

Mrs. H. W., age thirty, para five, gravida five, was first seen June 1, 1937. She stated that her last menstrual period was October 12, 1936. Life was felt in February, and movements continued until about May 1st. During this time she had had no pain and had not consulted a physician. One week before being seen there was a slight amount of vaginal bleeding. Her past obstetrical and general medical history were irrelevant.

Physical examination of the abdomen revealed a non-movable mass which extended 2 cm. above the umbilicus. The uterus, which was somewhat enlarged, was to the right and anterior to this mass. The mass filled the cul de sac and displaced the cervix forward and behind the symphysis. X-ray of the abdomen showed a fetus of about seven and one-half months gestation, with the breech in the pelvis.

Laboratory findings were: urine, negative; W. B. C., 7,900; hemoglobin, 98%.

Diagnosis of an abdominal pregnancy with a dead fetus was made and a laparotomy was performed June 4th. The fetal sac was found to be adherent to the intestines and the placenta was attached to the left broad ligament and peritoneum of the cul de sac. The fetal sac, uterus, and left adnexa and placenta were removed. A transfusion of 500 c.c. of citrated blood was given. The patient made an uneventful recovery and left the hospital on the fourteenth postoperative day.

A. M. SULLIVAN, M.D.,
D. A. BICKEL, M.D.,
South Bend.

TWENTY-FIVE YEARS AGO*

Some of the leading weekly and monthly publications now are carrying advertisements of bankers and brokers who offer bonds for people of small means. There was a time when it was next to impossible to purchase leading stocks or bonds in denominations of less than $5,000 to $25,000. But with an increase in the demand for safe investments as against the "wildcat" investments offered by mining concerns and other questionable enterprises, reputable bankers and brokers have realized that it was profitable to deal in bonds of small denomination which could be sold to the masses, and in consequence we now have listed gilt edged securities available in $100 and $500 amounts.

A report upon the use of salvarsan in sixty cases was published in the February, 1912, issue of THE JOURNAL. The author: Bernhard Erdman, M.D., senior assistant in the Department of Skin and Syphilis, Indiana University.

The Council of the Michigan State Medical Society directed its editor to clean up the advertising pages of the *Journal of the Michigan State Medical Society*, and to accept no new advertising contracts that do not conform to the recommendations of the Council on Pharmacy and Chemistry of the American Medical Association. We hope that the medical societies of Minnesota and Nebraska and some other states will purify the advertising pages of their journals and help us to create a better condition of things by upholding and supporting the great work that is being done by the American Medical Association through its Council on Pharmacy and Chemistry.

Since January 1 (1912) the membership of the Indiana State Medical Association has had added to it nearly 300 names of doctors who were not members last year. This increase of new members has been due to the efforts of nineteen county medical society secretaries who have reported more members in their respective societies than were reported during the year 1911.

The establishment, at the request of the Society for the Suppression of Unnecessary Noise, of zones of quiet around the hospitals in the city of New York, has proved so beneficial that hospital zones have been since instituted by municipalities throughout the United States.

Dr. F. C. Heath, of Indianapolis, in a letter reported the case of a patient in the Detroit Marine Hospital who swallowed a curved thermometer which was passed from the bowel twelve days later, registering 105, although the chart of the morning and evening temperatures at no time showed above 101.

Joseph Baron Lister, pioneer in antiseptic surgery. died at his home in London, February 11, 1912, aged 84 years.

The beautiful St. Vincent's Hospital on North Illinois Street in Indianapolis will be ready for occupancy September 1. There will be 250 beds and separate departments for special cases . . . cost of the ground, building and equipment will be about $1,000,000. It will be one of the best hospitals in the United States.

The erection of the Robert W. Long Hospital is to be started during the coming summer if present intentions of the Board of Trustees of Indiana University carry.

Dr. G. W. H. Kemper, of Muncie, sends the following: "The patient mentioned in THE JOURNAL of January who swallowed a fever thermometer and afterward passed it from the bowels had a more happy termination of his trouble than the man who swallowed a thermometer and died by degrees."

The only leper in Indianapolis, an old colored woman who has been under quarantine for several weeks, died March 18.

A recent examination of the teeth of school children in Indianapolis revealed the fact that 79.6 per cent of all those examined had mouths in bad condition. Only 32.34 per cent said they had tooth brushes; 27.52 per cent had irregularities in their mouths with teeth out of position so that perfect chewing is impossible.

A symposium on syphilis was published in the May, 1912, issue with Dr. W. P. Garshwiler, of Indianapolis, discussing diagnosis, Dr. Charles E. Barnett, of Fort Wayne, discussing sociological aspects, and Dr. D. C. Ridenour, of Peru, discussing treatment.

* *Editorial and news items from* THE JOURNAL *for 1912.*

DEATHS

Ephraim B. Chenoweth, M.D., aged fifty-six, of Seymour, died August twenty-fourth. Dr. Chenoweth had served with the U. S. Army as a physician during the World War. He graduated from the Medical College of Indiana, Indianapolis, in 1902.

Francis L. Resler, M.D., of Greentown, died as the result of an automobile accident, August twenty-seventh. Dr. Resler was sixty-two years old. He was a graduate of the Medical College of Indiana, Indianapolis, in 1904.

George R. Clayton, M.D., of Monon, died at the home of his daughter in Rensselaer, September ninth, aged eight-three years, after an illness of several months. He had practiced at Monon for fifty-six years. Dr. Clayton graduated from the Kentucky School of Medicine, Louisville, in 1880. He was a member of the White County Medical Society, the Indiana State Medical Association, and the American Medical Association.

Leon Whetsell, M.D., of Bloomington, died in an Indianapolis hospital, August twenty-fifth, aged fifty-seven years. Dr. Whetsell graduated from the Louisville Medical College, Louisville, Kentucky, in 1903.

Samuel Everett Jones, M.D., of Indianapolis, died August twenty-ninth, aged sixty-two years. Dr. Jones had practiced in New Richmond and in Lucerne, and had been located in Indianapolis since 1924. He graduated from Indiana Medical College, School of Medicine of Purdue University, in 1906.

Joseph Raymond Pugh, M.D., of Hammond, died August sixteenth, aged forty-three years. Dr. Pugh was a former president of the Lake County Medical Society and had been active in the medical affairs of his community since his location there in 1920. Dr. Pugh graduated from Northwestern University Medical School in 1920, and was a member of the staff of St. Margaret's hospital, a member of the Lake County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

Frank W. Black, M.D., of Ligonier, died August sixteenth, of a heart attack. Dr. Black collapsed a few moments after he had completed a tonsil operation in Lakeside Hospital, Kendallville. He had practiced medicine in Ligonier for forty years. He graduated from Bellevue Hospital Medical College, New York, in 1897, and was a member of the Noble County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. Dr. Black was sixty-six years old.

Frank Alembert Brayton, M.D., of Indianapolis, died September twentieth of heart disease. Dr. Brayton was forty-seven years old. Recognized as an authority on dermatology and syphilology, Dr. Brayton had practiced in Indianapolis for more than twenty years. He graduated from the Indiana University School of Medicine in 1912 and served with the Army during the World War, holding a first lieutenant's commission.

Joseph Cameron McClurkin, M.D., retired physician of Evansville, died September eighteenth, aged eighty-four years. Prominent in hospital and church work for many years, Dr. McClurkin, at the time of his death, was president emeritus of the staff of St. Mary's Hospital. Following his graduation from Bellevue Hospital Medical College in New York in 1880, Dr. McClurkin practiced in Illinois and in Connecticut for short periods and started his practice in Evansville in 1882, and retired from active practice in 1930 because of ill health. He was an honorary member of the Vanderburgh County Medical Society and the Indiana State Medical Association.

HOOSIER NOTES

Dr. Charles F. Thompson, of Indianapolis, has been appointed to succeed Dr. E. V. Hahn who has resigned as a member of the Bureau of Publicity of the Indiana State Medical Association.

Dr. H. Vaughn Scott is associated with Dr. Ernest R. Carlo at the Duemling Clinic in Fort Wayne in the practice of pediatrics.

The next examinations for group B candidates for examinations of the American Board of Obstetrics and Gynecology will be held Saturday, November 6, 1937, and Saturday, February 6, 1938, in various cities of the United States and Canada. Application for admission to the examinations must be filed on an official application form in the office of the Secretary at least sixty days prior to the dates mentioned above. The secretary is Dr. Paul Titus, 1015 Highland Building, Pittsburgh (6), Pennsylvania.

Dr. H. N. Middleton, of Indianapolis, recently completed a two weeks' postgraduate course in electro-cardiography at Michael Reese Hospital in Chicago.

Dr. William P. Fultz is to be delegate-at-large at the French Lick meeting and will stay throughout the session.

Colonel Robert Todd Oliver, former chief of the U. S. Army dental corps, died July eleventh in Washington, D. C. Dr. Oliver, born in Indianapolis, was once dental surgeon and professor of oral surgery of the Indiana Dental College (now the Indiana University School of Dentistry), and was a member of the Indiana State Dental Board. He was a dental surgeon in the Spanish-American War and in the World War. Dr. Oliver practiced in Indianapolis during the early years of his career and became widely known and admired throughout the State of Indiana. Dr. Robert T. Oliver was a brother of Dr. D. H. Oliver, former Indianapolis dentist, and of Dr. John Oliver, who was professor of surgery and head of the Department of Surgery in the Indiana University School of Medicine at the time of his death.

Dr. L. J. Danieleski, of Gary, was elected president of the Polish Medical and Dental Association of America at the annual convention of the organization in Boston last month. Dr. Joseph Sponder, of Gary, was made first vice-president, and Dr. Edward Nowicki was elected treasurer.

Dr. Max A. Bahr, of Indianapolis, has been reappointed superintendent of the Central State Hospital and has begun his fortieth year of service with the hospital. The hospital board has approved plans for the erection of a new 160-patient building to replace the men's unit which was erected in 1845.

The second national social hygiene day will be observed February 2, 1938.

Dr. Herman Morgan observed his 25th anniversary as secretary of the Indianapolis Board of Health, August 26th.

Dr. E. A. Meyerding, secretary of the Minnesota State Medical Association, has been granted a year's leave of absence from his duties. He will devote himself chiefly to his duties as secretary of the Minnesota Public Health Association during the next year.

The first West Coast meeting of the American Academy of Orthopedic Surgeons will be held next January, in Los Angeles. Special trains will stop over at Santa Fe, the Grand Canyon, San Francisco, and other points.

Dr. Pierce MacKenzie and family, of Evansville, expect to sail from Montreal, October first, for a three months trip to the British Isles. Dr. MacKenzie expects to do postgraduate work in Ireland, Scotland and England.

Dr. Max Bahr has been appointed head of the division of neurosychiatry of the Indiana University School of Medicine to succeed Dr. Frank Hutchins who has resigned.

The U. S. Public Health Service has had prepared a set of six educational posters to publicize the campaign to eradicate syphilis. The posters are obtainable from the Superintendent of Documents, Washington, D. C., at seventy-five cents per set.

Dr. William B. Challman, of Mount Vernon, has returned to his practice after several months absence in Europe where he did postgraduate work.

Dr. and Mrs. Quentin Row, of Hammond, have gone to Europe where Dr. Row will take special work in surgery. They will spend some time in London before Dr. Row goes to Vienna to study. They expect to return to Hammond the latter part of November.

Dr. E. H. Cowan, 91-year-old physician of Crawfordsville, was re-elected surgeon-general for the G. A. R. at its 71st national encampment at Madison, Wisconsin, September ninth.

Dr. N. W. Hatfield, of Indianapolis, and Miss Vivian Mewborn, of Indianapolis, were married recently. Dr. Hatfield is the son of Dr. and Mrs. Sidney J. Hatfield.

Charles Irwin Lambert, professor of psychiatry, Columbia University College of Physicians and Surgeons, New York, and professor of psychiatric education, Columbia University, will address the Indiana State Nurses' Association, Monday, October 11, at 2:00 p. m., and Tuesday, October 12, at 10:30 a. m., during the annual session of the nurses' organization at the Terre Haute House in Terre Haute. Dr. Lambert's subject will be "Directing One's Mental Development to Get the Most Out of Life."

The fifteenth annual reunion of the Marion County Tuberculosis Hospital at Sunnyside was held August 29th, with several hundred former patients and friends attending the reunion which marked the twentieth year of the institution. Dr. Herman G. Morgan, secretary of the Indianapolis Board of Health, spoke at a formal program following inspection tours of buildings and grounds.

The Medical Institute of the University of Toledo will present its fourth annual postgraduate day on Friday, November 19, in the Henry J. Doermann Theatre at the University. The committee has announced that speakers will include Dr. Frank H. Lahey and Dr. Lewis M. Hurxthal of the Lahey Clinic, Boston, in a series of lectures on thyroid disease.

Dr. John M. Grimes has been appointed assistant physician on the staff of Longcliff, the State Hospital at Logansport.

Dr. H. B. Gable has moved his offices to his new building at 110 Main St., Monticello. The building is a brick and tile structure, the first floor of which will be Dr. Gable's offices, and the second floor is divided into office spaces which have been rented.

Dr. Robert R. Pollom, who has practiced at Darlington for twenty-five years, has moved to Crawfordsville where he has completely equipped a new office.

An all-day district welfare meeting was held at the Sportsman Hotel, Monticello, September third, with Dr. Oliver W. Greer, director of the crippled children's division of the state welfare department, as principal speaker. The next district meeting will be held October 11 at the Purdue Memorial Union Building in West Lafayette.

The United States Civil Service Commission announces an open competitive examination for the position of associate medical officer ($3,200 per year). Applicants must qualify in at least one of the following optional branches, and must state in their applications the branch or branches desired: (1) cardiology; (2) cancer diagnosis and treatment; (3) eye, ear, nose and throat; (4) urology (genito-urinary); (5) internal medicine and diagnosis; (6) neuropsychiatry; (7) pathology and bacteriology; (8) roentgenology; (9) surgery; (10) tuberculosis; (11) venereal disease—a. clinical, b. public health; (12) industrial medicine; (13) general practice. Applications must be on file with the United States Civil Service Commission at Washington, D. C., not later than October 18, 1937. Application forms may be obtained from the secretary, Board of U. S. Civil Service Examiners, at any first-class post office, or from the U. S. Civil Service Commission at Washington, D. C.

Dr. Jack McKittrick is now associated in practice with his father, Dr. W. O. McKittrick, at Washington, Indiana.

The tenth annual graduate fortnight of the New York Academy of Medicine will be held November 1 to 12, 1937. Evening sessions will be held at the Academy, and clinical programs will be held in various hospitals. Registration (fee $3.00) is limited to the medical profession. The general subject is "Medical and Surgical Disorders of the Urinary Tract." A program and registration card may be obtained by writing to the New York Academy of Medicine, 2 East 103rd St., New York City.

The fifteenth annual meeting of the Academy of Physical Medicine will be held at the Hotel Walton, Philadelphia, October 19, 20, 21, 1937. A copy of the program may be had by addressing W. D. McFee, M.D., 41 Bay State Road, Boston, Massachusetts.

Dr. H. G. Steinmetz has resigned his position as assistant superintendent of the Logansport State Hospital to become supervisor of health in the sixth health district, composed of Johnson, Brown, Morgan, Monroe and Lawrence Counties. Dr. Steinmetz' headquarters will be at Indiana University in Bloomington. His duties will include the organization of an accredited school for training public health nurses in connection with Indiana University where he will serve as an instructor.

Construction has been started upon a two-story medical and surgical clinic building in Hammond at 6827 Kennedy Ave., to be utilized by the Indiana Harbor Clinic composed of Drs. C. C. Robinson, A. V. Cole, T. F. Cotter, James S. Niblick, and S. Lewis Stern.

In addition to the articles already enumerated, the following have been accepted by the Council of Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories
Ampoules Caffeine with Sodium Benzoate, 2 c.c.

American Research Products (Division of General Mills, Inc.)
Viosterol (A. R. P. I. Process) in Oil.

Armour & Co.
Suprarenalin 1:100 for Oral Administration.

Lederle Laboratories
Cevitamic Acid—Lederle
Tablets Cevitamic Acid—Lederle, 0.01 Gm.
Tablets Cevitamic Acid—Lederle, 0.05 Gm.

Eli Lilly & Co.
Sulfanilamide—Lilly
Sulfanilamide Tablets, 5 grains.

Pure Carbonic, Inc.
"Pureco" Carbonic Acid Gas.

E. R. Squibb & Sons
Antipneumococcic Serum, Type I, 10,000 units.
Antipneumococcic Serum, Type I, 20,000 units.

BUREAU OF PUBLICITY
INDIANA STATE MEDICAL ASSOCIATION

August 3, 1937.

Present: William N. Wishard, M.D., chairman; F. M. Gastineau, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting of July 21 corrected and signed. Minutes of the meeting of July 28 approved for signature.

Suggestion made that the Bureau of Publicity prepare a release on poliomyelitis in order to allay the fears of the public concerning this disease.

Tribute to Doctor William H. Stemm, of North Vernon, one of the past presidents of the Indiana State Medical Association, upon the occasion of the celebration of his fiftieth anniversary in the practice of medicine, prepared by the chairman of the Bureau. The secretary was authorized to read this tribute at the meeting of the Tri-County Medical Society at Muscatatuck State Park on August 4 in honor of this past president.

Final corrections and suggestions made for the annual report of the Bureau and approval given for printing of the report.

August 17, 1937.

Present: William N. Wishard, M.D., chairman; F. M. Gastineau, M.D., by proxy, and Thomas A. Hendricks, executive secretary.

Minutes of the meeting of July 28 signed. Minutes of the meeting of August 3 approved for signature.

The release, "Infantile Paralysis," approved for publication in Saturday papers, August 21.

The release, "State Fair Health Exhibit," approved for publication in Saturday papers, August 28.

Report on meetings:

August 4—Tri-County Medical Society, Muscatatuck State Park. The meeting was held in honor of W. H. Stemm, M.D., past president of the State Association, who has completed fifty years in the practice of medicine. The president, president-elect, and other officers of the state, district and local societies were speakers. (75 present.)

Bulletin received from the Wayne County (Detroit, Michigan) Medical Society telling of the distribution of questionnaires to the physicians of that county upon the subject of professional rebates. The secretary was instructed to write to the secretary of that society to obtain any information that is available, as developed by this questionnaire, in regard to the opinion of the profession concerning rebates.

Letters in regard to the LaPorte Medical School brought to the attention of the Bureau. The chairman of the Bureau is to prepare a statement concerning the early LaPorte Medical School and its faculty which is to accompany the pictures of this institution and the members of its faculty to be displayed at the annual session of the Association at French Lick.

Letter concerning the proposed exhibit of the "Transparent Woman" to be reviewed by the chairman of the Bureau and report made at the next meeting of the Bureau. The "Transparent Woman" is an exhibit sponsored by a commercial concern.

Article appearing in "The Chiropractice Home," a magazine published by chiropractors, brought to the attention of the Bureau as the author of one of the articles stated that she was indebted to a physician who is a member in good standing of the Indiana State Medical Association "for valuable suggestions from time to time." The physician whose name was used brought the matter to the attention of the Bureau of Publicity and stated that the name had been used without authority. The Bureau of Publicity suggested that the physician whose name was used without authority write to the editor of the magazine stating that there was no authorization to use the name and objecting strenuously to its use.

INDIANA STATE BOARD OF HEALTH

Bureau of Communicable Diseases

MONTHLY REPORT, AUGUST, 1937

J. W. JACKSON, M.D.

Diseases	Aug., 1937	July, 1937	June, 1937	Aug., 1936	Aug., 1935
Tuberculosis	181	487	247	140	250
Chickenpox	16	39	139	9	6
Measles	72	588	2,148	8	27
Scarlet Fever	82	138	320	68	99
Smallpox	15	29	61	1	0
Typhoid Fever	26	42	12	43	69
Whooping Cough	131	330	297	86	139
Diphtheria	24	42	29	38	58
Influenza	13	21	39	20	124
Pneumonia	35	31	69	29	51
Mumps	9	26	73	16	10
Poliomyelitis	34	31	1	4	8
Meningitis	5	5	7	7	10
Undulant Fever	1	5	0	1	0
Malaria	4	0	0	2	12
Encephalitis	1	0	0	0	3
Spotted Fever	1	0	0	0	0

ELEVENTH DISTRICT MEDICAL SOCIETY

The scientific program for the Eleventh District meeting to be held in Kokomo, October 27, 1937, is as follows:

1. Medical Management of Mild Gallbladder Disease.
   Clarence F. G. Brown, M.D., Associate professor of Medicine, Northwestern University School of Medicine.
2. Heart Disease Complicated by Pregnancy.
   Don Sutton, M.D., professor of medicine, Northwestern University.
3. Prenatal and Postnatal Care.
   F. B. Mitman, M.D., Huntington.

There will be a clinic in the forenoon and an evening banquet under the auspices of the Howard County Medical Society.

A cordial invitation to doctors of adjoining counties is extended.

County Societies

CASS COUNTY MEDICAL SOCIETY held a dinner meeting September sixteenth, at Logansport, with Dr. Matthew Winters, of Indianapolis, as principal speaker.

* * *

FAYETTE-FRANKLIN COUNTY MEDICAL SOCIETY members met at Magnesia Springs, Brookville, September fourteenth, with thirteen present. Dr. Bennett Kraft, of Indianapolis, spoke on "Allergy."

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FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY met at the Chamber of Commerce Building, Fort Wayne, September seventh. Speakers were Drs. Edwin E. Ziegler, A. J. Sparks, K. M. Beierlein, and A. H. Williams, who presented a symposium on "Sulfanilamide Therapy." Attendance numbered forty-two.

On September fourteenth, the society met at Irene Byron Sanitarium near Fort Wayne for an afternoon and evening meeting. Dr. Jerome R. Head, of Chicago, was the principal speaker, his subject being "Thoracic Surgery." Attendance numbered seventy-five. The afternoon program was sponsored by the State Anti-Tuberculosis Society. This program was in the nature of a formal opening of the new medical addition to the Irene Byron Sanitarium.

* * *

GIBSON COUNTY MEDICAL SOCIETY members met at the Emerson Hotel in Princeton, September thirteenth. Dr. Louis H. Segar, of Indianapolis, discussed "Preventive Medicine in Children." Attendance numbered twenty-three.

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JAY COUNTY MEDICAL SOCIETY members met at the Portland Country Club, September tenth, with an attendance of twenty-four. Speakers were Dr. Jack Herman and Mrs. William R. Rosenthal, of Cincinnati, whose subject was "The Maladjusted Child."

* * *

KNOX COUNTY MEDICAL SOCIETY members met at the Jewel Cafe, Vincennes, September fourteenth, for a dinner meeting. Dr. Bert E. Moore was the principal speaker, his subject being "Finding Cases of Tuberculosis." Attendance numbered eighteen.

* * *

LAKE COUNTY MEDICAL SOCIETY held their September ninth meeting at the Woodmar Country Club, Hammond. Speakers were all from the staff of the Indiana University School of Medicine and included Dr. E. V. Hahn, who spoke on "Tic Douloureux and Other Painful Conditions of the Face and Head," Dr. Robert Moore who discussed heart conditions, Dr. E. S. Jones who spoke on "Ruptured Appendix," Dr. John E. Dalton whose subject was "Pregnancy, Complicated by Syphilis," and Dr. Willis D. Gatch, dean, whose subject was "Surgical Prognosis."

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MADISON COUNTY MEDICAL SOCIETY resumed regular monthly meetings with a dinner meeting at St. John's Hospital, Anderson, September thirteenth. Dr. O. B. Norman, of Indianapolis, was the principal speaker.

* * *

THE MUNCIE ACADEMY OF MEDICINE has announced some of its speakers for the fall season. On September fourteenth, Dr. A. A. Reudemann, of the Cleveland Clinic, talked on "Headache." On October twelfth, Dr. Walter M. Simpson, of Dayton, Ohio, will talk on "Fever Therapy." Dr. J. A. Bargen, of the Mayo Clinic, will address the Academy on November ninth, when his subject will be "The Anemias of Intestinal Disease: Their Nature, Cause, and Treatment." Other speakers will include Dr. Max Peet, of the University of Michigan; Dr. Wallace Herrell, of the Mayo Clinic, and Dr. Walter Stuck, of Houston, Texas.

* * *

ST. JOSEPH COUNTY MEDICAL SOCIETY members met at the Jefferson Plaza, September fourteenth, with fifty members present. Dr. Fred R. Clapp presented a paper on "Leukorrhea." Dr. George Rosenheimer reported that the weekly five-minute radio broadcasts by members of the local medical society over WSBT would start September twenty-seventh.

* * *

TIPPECANOE COUNTY MEDICAL SOCIETY met at Lincoln Lodge, Lafayette, September fourteenth, with Dr. John and Dr. J. Pemberton of the Mayo Clinic as principal speakers. Subjects were "Carcinoma of the Rectum and Recto-Sigmoid," and in the afternoon a clinic on goiter was held.

Dr. Bertha Rose was voted into the society by transfer from Lake County, and Dr. Clyde R. Netherton, of Chalmers, also was made a member of the society, making ninety-two members for Tippecanoe County.

VANDERBURGH COUNTY MEDICAL SOCIETY held a meeting at the Vendome Hotel in Evansville, September fourteenth, with the program made up of case reports presented by Drs. W. C. Caldwell, W. L. Daves, Charles Leich, E. Weber, and R. W. Springstun. Attendance numbered forty. Dr. Darwin Short and Dr. Charles P. Schneider were voted into membership in the society.

* * *

WABASH COUNTY MEDICAL SOCIETY held a meeting at the Sheller Hotel in North Manchester, September fifteenth, with Dr. John Warvel, of Indianapolis, as principal speaker. His subject was "Diabetes Mellitus in Children and Protamine Zinc Insulin."

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WHITLEY COUNTY MEDICAL SOCIETY members met September fourteenth at the home of Dr. Jesse Briggs, in Churubusco. Physicians from Fort Wayne, Columbia City, and South Whitley attended. They were entertained by Frank Carleton Nelson, who read some of his poems, and by Mrs. John Sturgis, Fort Wayne singer.

BOOKS

BOOKS RECEIVED

GOULD'S POCKET PRONOUNCING MEDICAL DICTIONARY. By the Late George M. Gould, A.M., M.D., author of the "New Illustrated Medical Dictionary," etc. Tenth edition of over 40,000 words revised by C. V. Brownlow. Bound in flexible fabrikoid. $2.00 plain; $2.50 with thumb index. P. Blakiston's Son and Co., Inc., Philadelphia, 1936.

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RECENT ADVANCES IN INDUSTRIAL HYGIENE AND MEDICINE. By T. M. Ling, M.A., B.M., M.R.C.P. 212 pages with 29 illustrations. Cloth. Price $3.50. P. Blakiston's Sons and Co., Inc., Philadelphia, 1937.

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THE TRAFFIC IN HEALTH. By Charles Solomon, M.D., Assistant Clinical Professor of Medicine, Long Island College of Medicine. 393 pages. Cloth. Price $2.75. Navarre Publishing Co., Inc., New York, 1937.

* * *

THE HUMAN BODY. By Logan Clendening, M.D. Illustrations by W. C. Shepard and Dale Beronius. Third edition. Corrected, enlarged, and rewritten. 443 pages and ix pages of index. Cloth. Price $3.75. Alfred A. Knopf, New York, 1937.

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INTERNATIONAL CLINICS. A Quarterly of illustrated clinical lectures and especially prepared original articles. Edited by Louis Hamman, M.D., visiting physician, Johns Hopkins Hospital, Baltimore, Maryland. Volume III, 47th Series, 1937. J. B. Lippincott Company, Philadelphia, Montreal and London.

* * *

PSYCHIATRIC NURSING. By William S. Sadler, M.D., chief psychiatrist and director, the Chicago Institute of Research and Diagnosis; in collaboration with Lena K. Sadler, M.D., associate director, the Chicago Institute of Research and Diagnosis, and Anna B. Kellogg, R.N., chief of nurses, the Psychiatric Clinic of the Chicago Institute of Research and Diagnosis. 433 pages. Cloth. Price $2.75. The C. V. Mosby Company, St. Louis, 1937.

BOOKS REVIEWED

PHYSICAL DIAGNOSIS. The Art and Technic of History Taking and Physical Examination of the Patient in Health and in Disease. By Don C. Sutton, M.S., M.D., Associate professor of medicine, Northwestern University School of Medicine. 495 pages with 298 illustrations. Cloth. Price $5.00. The C. V. Mosby Company, St. Louis, 1937.

Written to familiarize the student and physician with methods of examination by use of the senses, this volume is very concise and precise; yet it omits no details of real value in arriving at a diagnosis.

The book is profusely illustrated and has many most excellent radiographs, all of which should be quite helpful. The entire subject is treated most accurately.

* * *

THE TECHNIC OF LOCAL ANESTHESIA. By Arthur E. Hertzler, M.D., professor of surgery in the University of Kansas and surgeon to the Halstead Hospital, Halstead, Kansas. Sixth edition, 283 pages with 142 illustrations. Cloth. Price $5.00. The C. V. Mosby Company, St. Louis, 1937.

As the title indicates, this excellent volume treats of local anesthesia as applied for surgical procedures on any and every part of the human body. The directions in technic are very accurate and exact.

The chapter on Spinal Anesthesia, as revised by Dr. Irene A. Koeneke, is very concise; and, though others of experience might question parts of the procedures explained, yet, as a whole, the subject matter is handled with due conservatism.

The book should become a valuable adjunct to the library of every student, surgeon, and anesthetist.

* * *

SHADOW ON THE LAND—SYPHILIS. By Thomas Parran, M.D., Surgeon General of the United States Public Health Service. 309 pages, illustrated. Cloth. Price $2.50. Reynal and Hitchcock, Inc., New York City, 1937.

This is an important book for the medical profession because it contains the expressed opinions of one of our foremost health authorities and government officials in regard to public health and his views upon syphilis.

The early chapters portray in simple language the invasion of syphilis in the body and various complications of acquired and congenital syphilis. There is also a discussion of the laboratory tests. The history of syphilis is reviewed and the ancient origin and the American origin both are presented impartially. The development of the various remedies used in early times as well as modern drugs such as the arsenicals and bismuth is traced. Dr. Parran quotes the work of the Cooperative Clicinal group in discussing the modern method of treatment and favors continuous treatment without rest periods.

Requirements for diagnosis and treatment are discussed, and programs for action are outlined, including the prevention of congenitai syphilis by taking blood tests upon every pregnant woman as well as upon applicants for marriage licenses and insurance policies.

Dr. Parran closes his book with a summary of treatment and what can be accomplished. A number of aphorisms complete the book. There are many good charts to illustrate the important points in the book. A number of anecdotes enliven the discussion and give one a better understanding of the author. He infers that private practice will be given its chance to work out the syphilis program and government will act as the complement.

This book could be read easily by the laity and will exert quite an influence on present medical thought. Don't pass it up.

For further comment, read the editorial on page 539 in this issue.

ABSTRACTS

ARTIFICIAL FEVER TREATMENT OF CHOREA: TWO-YEAR STUDY

During the last two years Clarke H. Barnacle, Jack R. Ewalt and Franklin G. Ebaugh, Denver (*Journal A. M. A.*, July 10, 1937), treated forty-five cases of Sydenham's chorea with the Kettering hypertherm. Thirty-seven patients recovered and eight were markedly improved. They have attempted to follow these patients closely and have succeeded in checking forty of the original number. There have been four recurrences; three of these patients have received a second course of fever. An additional patient showed occasional twitching. Thirty-six patients who were followed were cured. Of this number three patients were considered markedly improved under the immediate results. Four patients were classed markedly improved in the recent follow-up study. The average number of treatments was 12.6 and the total hours of fever 32.9. The patients were under treatment an average period of 22.3 days. It is interesting to note that a greater number of heatings were needed in the severe type, while the moderate and mild cases required successively less fever. The presence of carditis, the history of previous attacks and the duration of symptoms prior to fever bore no relationship to the number of heatings required. The incidence of carditis was 42.2 per cent; that is, nineteen cases. Immediately following pyretotherapy, seven patients with carditis had recovered, eight were improved and four were unchanged. A patient with pericardial effusion responded satisfactorily to fever and the effusion disappeared. Twelve of the nineteen cases of carditis have been carefully checked in recent follow-up examinations. Six patients were cured and are on a full activity program, while six were improved. The fact that thirty-six of the forty patients followed in this two-year study are found to be cured indicates that pyretotherapy is of lasting benefit. However, further study may prove that the results obtained by this therapeutic method are not sustained. Short treatments of two and one-half hours' duration at temperatures of from 105 to 105.4 F. (rectal) are most effective if given daily. Longer treatments are necessarily more fatiguing, result in loss of weight, and are dangerous in the face of a complicating carditis. Although fewer fever sessions may be given if the duration of the temperature is longer, the actual hours of fever are approximately the same in the two instances. In the 562 treatments administered to the forty-five chorea patients there were only twelve deliriums. The facts that the heatings are short, that sedatives are but rarely necessary and that the children are very comfortable in the Kettering hypertherm may explain this low incidence. The nurse technician usually reads stories to the children and carries them along in conversations about their daily activity. Children are rarely bothered with post febrile nausea and retain 2 liters of salinized water without difficulty.

THE AMOUNT OF "BENZEDRINE" IN A THERAPEUTIC DOSE WITH "BENZEDRINE INHALER"

By means of a special measuring apparatus, Simpson and Simon (*Am. J. Pharmacy*, 109:343, July, 1937), determined the average amount of "Benzedrine" (benzyl methyl carbinamine, S. K. F.) inhaled from a therapeutic dose with "Benzedrine Inhaler." The greatest amount obtained from two inhalations in each nostril (the recommended dosage) was 0.67 mg. and the smallest amount 0.09 mg. The average of the 90 tests made was 0.2 mg.

On this basis it would require 315 inhalations at one time to equal the average oral therapeutic dose of 20 mg. of "Benzedrine Sulfate." Natural loss of "Benzedrine" through exhalation might further widen the margin of safety. It is concluded that serious toxic reactions from the use of "Benzedrine Inhaler" appear unlikely, even with gross overdosage.

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TRACING SYPHILIS THROUGH COMMON AILMENTS: CLINICAL LECTURE AT ATLANTIC CITY SESSION

A. Benson Cannon, New York (*Journal A. M. A.*, July 31, 1937), points out that the present study was originally conceived as part of a larger one dealing with the accomplishments of arsphenamine in the treatment of syphilis of all stages. For this purpose a systematic record was kept of all adult patients admitted to the department of dermatology from the spring of 1935 to the spring of 1937 whose ultimate diagnosis was syphilis. In the course of this study it became increasingly apparent that a large proportion of the patients so admitted arrived in this department by accident rather than by design, having presented themselves originally for some complaint totally unconnected with syphilis—at least in their own minds and frequently also in the opinion of the admitting physician. The approximately 600 cases of syphilis recorded to date are unselected, then, as regards latency and represent all syphilitic patients who were treated with arsphenamine during any or all of this period. It leaves out of account those who received only intramuscular injections and/or silver arsphenamine. Among these 600 cases there were 300-odd admissions in whom active syphilis was not at first suspected. Not until commonplace injuries failed to heal after weeks or months of treatment by ordinary measures were some of these patients discovered to have a positive Wassermann reaction and some a history of a previous infection, overlooked or passed by as irrelevant to the present complaint. The mystery of the slow healing operative wound —even after the extraction of a tooth—is often solved by the simple procedure of taking a blood test. It was found that a surprisingly large proportion of these patients had presented as their chief complaint some ailment commonly encountered in general practice under the names of gastro-intestinal disorders, chronic disorders of the respiratory tract, urinary symptoms, gynecologic ailments and miscellaneous arthritis, diabetes, hernia, goiter and the like. The present report attempts to describe, in a selected group of cases, the methods by which other causes were eliminated, and the symptoms were traced to a syphilis heretofore either unsuspected or supposedly inactive. Symptoms which brought patients to the clinic, the diagnostic procedures, including laboratory tests, x-ray examinations and pathologic changes, the evidence for syphilis and the treatment and its results are described by the author in the hope that this approach, by symptoms rather than systems (the usual textbook method), may prove of considerable interest and some practical value.

EXCESSIVELY RAPID HEART RATES

James Alexander Lyon, Washington, D. C. (*Journal A. M. A.*, April 24, 1937), reports a case in which a ventricular rate of from 310 to 313 beats per minute was recorded electrocardiographically. This rapid rate occurred during an attack of streptococcic meninigitis in an infant 4½ weeks of age. When the patient came to necropsy three weeks later, the heart was found to be grossly normal. A microscopic examination of the tissue showed no evidences of infection or fibrosis of the heart muscle. Sixteen cases having heart rates of approximately 300 beats per minute were collected from the literature. The arrhythmia presented in the electrocardiogram in the author's case was interpreted as paroxysmal auricular flutter with one-to-one response and intraventricular block due to fatigue of the heart muscle. A study of the cases of excessively rapid heart rates collected from the literature revealed the difficulties of interpreting such arrhythmias. In an attempt to determine whether any unanimity of opinion existed concerning their interpretation, copies of the electrocardiogram were submitted to eleven cardiologists in America and eight abroad who gave unqualified agreement to the diagnosis of paroxysmal auricular flutter with one-to-one block and intraventricular block due to fatigue of the heart muscle. Six additional American cardiologists thought that the interpretation was probably correct but that some other diagnosis

(Continued on Page xxiv)



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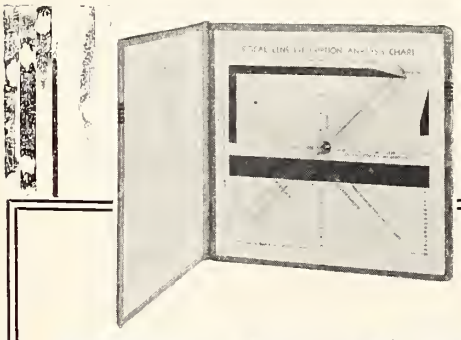
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(Continued from Page xxii)

could not be ruled out with certainty. Six American cardiologists interpreted the arrhythmia as paroxysmal ventricular tachycardia and one as paroxysmal auricular tachychardia. To several the marked regularity of the tracing spoke against its being ventricular tachycardia; to others the distortion of the ventricular complexes in leads 1 and 2 suggested a tachycardia of ventricular origin. Some thought that the only mechanism that would cause so rapid a rate was auricular flutter; others that rates as high as 300 were possible in paroxysmal tachycardia in children. One cardiologist had observed similar records in experimental animals when the evidence pointed to its being paroxysmal tachycardia.

INCIDENCE OF OPERATIONS FOR GOITER IN SOUTHERN MICHIGAN: EFFECT OF IODIZED SALT AFTER TWELVE YEARS' GENERAL USE

Roy D. McClure, Detroit (*Journal A. M. A.*, Sept. 4, 1937), states that through cooperation of the Michigan State Medical Society, the state board of health, Dr. O. P. Kimball and the salt manufacturers, iodized salt was introduced in 1924 through the grocery stores without any legislation. Iodized salt as used in Michigan did at first apparently increase the number of thyroid operations. The increase occurred in the nodular goiter or adenoma group. The iodized salt may have activated a group of patients with quiescent adenomas, producing toxic goiter symptoms. The increase reached its peak in the second year after the introduction of iodized salt. An increase in the death rate from goiter as shown by the board of health statistics reached its peak in the second year after the introduction of iodized salt. There was no increase in hyperthyroidism excepting in the nodular goiter or adenoma group. The number of operations for toxic diffuse and toxic nodular goiter has rapidly and steadily decreased after the apex of the second year excepting for a slight increase during the last three years. The incidence of endemic goiter or enlarged thyroid has been reduced almost to nil since iodized salt has been so widely used. No cases are now seen which show the slightest ill effects from the use of iodized salt. Toxic nodular goiter and toxic diffuse goiter are less apt to occur when there has been no previous enlargement of the thyroid (endemic goiter); at least this would seem a safe conclusion based on the experience in Michigan. As the publicity concerning the necessity for the use of iodized salt has fallen off, the sales of iodized salt have decreased until today one of the larger retail dealers in Detroit sells only about 50 per cent of iodized salt. Others range in sales up to 75 per cent, while the average is 75 per cent. The result of this delinquency is shown by a slight rise in the number of goiters in school children and in operating rooms. To combat this slump, continued publicity must be given to this subject, or should a law be passed making it mandatory for grocers to sell only iodized salt?

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PRESIDENT'S ADDRESS*

E. D. CLARK, M.D.

Indianapolis

FINE MORALE OF THE PROFESSION

Seldom, if ever, has the medical profession of Indiana been in better condition than at the present time. We have come through some hard years, we face a future in which many things cannot be seen clearly, and even when seen cannot always be evaluated correctly—but as a profession we can look with confidence and a great thrill to the prospect of our Indiana profession, which is better equipped in all respects than ever before, to be of service to the people of our state. We have more members than ever before in the history of the Association, and before the year ends, we hope that three thousand physicians will be on our rolls. The State Association never has made a membership drive, but we look forward to the time when every eligible physician will be a member of his local county medical society and of the State Association.

ACCOMPLISHMENTS DURING PAST YEAR

Despite the uncertainties of the past year, the medical profession of Indiana can list many accomplishments. To obtain a complete review of these accomplishments, one should read and familiarize himself with the annual committee reports printed in the convention issue of THE JOURNAL and the handbook of the House of Delegates, but here we will name only the outstanding ones:

Continued growth and added strength of the Association in all its functions, both scientific and economic;

Largest meetings and best scientific programs in history of district and local societies;

Most successful postgraduate course in the history of the Association;

Defeat of all cult legislation introduced in the General Assembly;

Continued wide acceptance of Bureau of Publicity releases by newspapers of the state;

Interest-creating State Fair exhibit;

Increase in size, quality and prestige of THE JOURNAL;

Enlargement of library at the state headquarters office;

Complete coverage with the efficient aid of the Women's Auxiliary to the Indianapolis Medical Society of the National Conference of Social Work held in Indianapolis in May, the fountainhead of many movements to socialize the practice of medicine and flood the country with social service workers;

Increased interest of the profession in the numerous campaigns against cancer, heart disease, tuberculosis, and syphilis;

Increased influence of the Indiana State Medical Association in the affairs of the American Medical Association with one of its members honored by election to trustee of the American Medical Association; and

Constructive leadership in the battle against socialized medicine.

TRIBUTE TO DOCTORS OF SOUTHERN INDIANA

These are some of the more obvious accomplishments of the Association during the past year, but no list would be complete without a tribute to the great accomplishment of the medical profession of southern Indiana and the outstanding work of the profession during what has been termed "the greatest peacetime disaster in the history of the United States." Doctors of southern Indiana were on the job from the start, many of them going out in boats to rescue their fellowmen from the rising waters, knowing in the meantime that their homes and offices were being flooded and their equipment ruined. But true to the code of the profession, human life came first. The doctors worked long hours, almost without sleep, establishing first aid stations, organizing emergency hospitals, delivering babies, fighting pneumonias, and giving heaven knows how many thousands of typhoid and tetanus prophylactic treatments—and for the most part, this was all rendered without compensation and without thought of compensation. The profession throughout the state was quick to offer its services, county medical societies organizing to care for the flood

* Presented at the French Lick Session of the Indiana State Medical Association, October 4, 1937.

refugees who were scattered throughout the state. Many upstate doctors volunteered and served in the flooded areas with the guard, the naval reserve, the Red Cross, the Legion, and the Public Health Department. The result stands as a landmark in medical history—not a single case of typhoid developed in the entire flooded district of southern Indiana during the high waters or the succeeding months! Had not the Indiana profession, armed with the knowledge and the implements of scientific medicine, been on the job, any of us can picture the inevitable typhoid epidemic that would have followed the flood.

MEDICAL EDUCATION

The status of the medical profession in any state may be judged by the type of medical education available to the physicians of that state. Hence the standing of the Indiana University School of Medicine is of great concern to all physicians in the state, whether they are graduates of that institution, whether their sons may attend that school, or whether they possess a natural state pride merely because it is located within our borders. As a result, when rumors are being circulated from one end of the state to the other that conditions are not what they should be, I, as one of those who helped to found that school, as secretary and a member of the faculty, as president of the State Medical Association, am greatly concerned and I know that the entire profession is deeply interested in the school.

The Council on Medical Education and Hospitals of the American Medical Association, the official rating agent of medical schools, was asked for the facts—for a report on the matter. While it is my belief that such information should be available to every physician, I received word that this information could be obtained only with the consent of the head of the school. Then a letter was sent to the head of the school, and in reply he said he had referred the matter to the Board of Trustees. To date nothing further has been heard although the newspapers report that the Board of Trustees has met since my communication was sent to the dean. Because of the lack of knowledge of the situation, I recommend that the chair be authorized to appoint a committee to make a detailed survey of the situation. It should be the duty of this committee to ascertain whether or not it is true that the Council on Medical Educaion and Hospitals feels that it is a detriment to have a medical school divided as is ours between Bloomington and Indianapolis. This committee should check the old correspondence and find out why the tacit understanding arrived at when this school was started in Indianapolis, that the entire course would be carried on there, has never been put into effect.

It is my conviction that the entire course should be given in Indianapolis. Dr. William D. Cutter, secretary of the Council on Medical Education and Hospitals of the American Medical Association, has written as follows, in answer to a communication, concerning "divided" medical schools:

> "I am sure that the Council is convinced that such an arrangement is most inexpedient in that it prevents the close association of those members of the faculty who teach the preclinical subjects with those who are actually engaged in the practice of medicine. It also interferes with the proper arrangement of the curriculum in that the courses must be made to conform to geographical restrictions rather than to the needs of the students."

As the schools were being united back in 1907-1908, this was the most difficult problem to solve. The entire course was given in Indianapolis for a year or two, but the authorities at Bloomington claimed that the instruction could be given with less expense at Bloomington.

When the Indianapolis Medical College transferred its property at Senate Avenue and Market Street to Indiana University, it was verbally agreed that the complete course would be given in Indianapolis. This property was very soon transferred to the State of Indiana and a hundred thousand dollar credit was given to Indiana University School of Medicine. That money was to be used in building a medical school in Indianapolis. Since then two pretentious and expensive buildings have been constructed at Bloomington for the anatomical and chemistry departments. This would look as though the intent is to retain indefinitely the first year of medical training at Bloomington, despite the original agreement.

It is the consensus of medical educators that students from the beginning of their training should be under the influence and receive their instruction from men in the active practice of medicine.

It should be the duty of this investigating committee to determine whether the Council on Medical Education and Hospitals of the American Medical Association feels, as it is said to feel, that the school should have more full-time men on its faculty and not doctors who divide their time and attention between private practice and school administrative or state administrative duties. This committee should be empowered to make recommendations that will, if such is the case, avert any findings that will mean the loss of the prestige of the university and the profession of the state.

This committee should study the methods used in the selection of candidates for entrance into the medical school. I believe that boys from our own state should be given preference when everything else is equal. Each candidate should be seen and interviewed by members of the faculty who are in the active practice of medicine. They should inquire how the candidate obtained the money for his preliminary education. If a

young man displays the determination and has the energy to secure the funds for his education, that should be used in his adaptability test.

We all know that a number of students have come from other states and have located for a short time in towns in Indiana and then have applied as residents of the state for entrance to the university. It would not take long to ascertain whether this man was a bona fide citizen of our state or was using this method to gain entrance into the school.

I know of a number of instances where sons of Indiana doctors have been unable to enter Indiana University because of some technical fault, but have entered such schools as Rush, University of Pennsylvania, Georgetown, and others. Some of these young men have been told that they were totally unfitted for the medical profession. I have seen these same men come back to our state and make splendid records.

I wish to state again that I believe that candidates should be examined by men who are in the active practice of medicine.

TRAINING SCHOOL FOR PUBLIC HEALTH NURSES

Newspapers recently have spoken of the establishment of an accredited training school for public health nurses at Bloomington. We suggest that the training given these nurses be given by doctors familiar with the subject rather than by social service workers.

POSTGRADUATE COURSE

In marked contrast with our concern over these matters of undergraduate education is our feeling of pride over the splendid progress that the Indiana State Medical Association and the Indiana University School of Medicine are making in graduate education work. Few finer programs are available anywhere in the country than the refresher courses given last spring in Indianapolis. Here Indiana physicians enjoyed the opportunity of a week's review which gave them first hand information and actual demonstrations of the latest practical procedures and technic in diagnosing and treating disease.

CAMPAIGN AGAINST SYPHILIS

If I were asked to name the most important step taken in medicine this past year, I would say it is the arousing of public consciousness to the despair, misery and untold sufferings from syphilis and venereal disease. In so many of these campaigns against cancer, heart disease, and mental disturbances, little can be done by the general practitioner. The majority of the advances in the treatment of these diseases from here on must come from the large medical research laboratories. However, it is within the province and the power of each individual physician to make the motto adopted for the Indiana campaign against syphilis, "No child born in Indiana by 1940 with syphilis," come true. I urge each county medical society to take an active and aggressive part in this fight against a great scourge and enemy—an enemy whose viciousness and terrors, so long hidden and undiscussed, have been dragged out into the open by the courageous leadership of the United States Surgeon General, Doctor Thomas Parran.

PLEA FOR INDIVIDUALITY

In praising the courage of Doctor Parran in this respect, I wish to remark here that I hope the day will never come when the individual physician loses that thing which is to be valued above all other attributes and qualities of a doctor—his intellectual honesty. Doctor John B. Deaver once said in a discussion on medical education that when a course is standardized, it ceases to progress. He said that we turn out graduates much the same as Ford turns out automobiles—all alike. The recent Middletown study, mentioned in the September issue of The Journal, makes the same comment about the profession.

Here I make the plea to each of you to maintain through thick and thin your intellectual honesty and hold high that tradition which means so much to us here in Indiana, that tradition which makes a man rise up on his hind feet once in a while and speak his mind regardless of the consequences.

INSTITUTIONS FOR THE MENTALLY ILL

A problem of which the proper authorities must take notice and solve is that arising from the present understaffing of our state institutions caring for the mentally ill. Several recent surveys have shown the pressing need for immediate rectification of the situation here in Indiana. One of these surveys conducted by Colonel H. Edmund Bullis, executive officer of the National Committee for Mental Hygiene, reads as follows in regard to the Indiana situation:

> "In order to bring the Indiana hospitals up to standard and relieve the overload on the medical staffs, there would be required immediately 7 more physicians in the Central Hospital, 7 in the Logansport State Hospital, 6 in the Richmond State Hospital, 5 in the Evansville State Hospital and 7 in the Madison State Hospital, or a total of 32 physicians. In other words, the hospitals have 19 physicians as against 51 indicated by the standards of the American Psychiatric Association.
>
> "There is also a serious shortage of nurses and attendants. The standards of the American Psychiatric Association prescribe that the maximum load per nurse or attendant should not exceed 8 patients. In Indiana it is nearly 14 patients, which means that the patients are receiving only about half the attention required. To bring this service up to normal, it has been estimated that 397 additional attendants and

nurses would be needed in the Indiana mental hospitals.

"It is interesting to note that in the whole United States, the percentage of graduate nurses on mental hospital nursing staffs constitute from 11 to 12 per cent. According to the last report, there were only 3 graduate nurses in the Indiana State hospitals, or about one-half of one per cent of the total nursing staff."

CONCLUSIONS

I have not attempted to give any comprehensive review of medical problems, questions, and principles. From my short experience as head of the State Medical Association I have obtained some conception of how complicated is our own little medical world in which we are working. Judging from the multiplicity of the questions arising in our own state, I can imagine the colossal task faced by the American Medical Association and I have only words of admiration for the manner in which that organization functions and for its able leadership to date.

In conclusion I express to you all my deepest appreciation for your help, your confidence and your encouragement in my efforts. And finally, the friendships which have come to me through the many years we have worked together both as a private practitioner and in the last few years as an officer of your Association have, I assure you, meant more to me than any material gains or any honors which it has been my privilege to receive.

ABSTRACT

BENZEDRINE SULFATE IN POSTENCEPHALITIC PARKINSONISM

P. SOLOMON, R. S. MITCHELL, and M. PRINZMETAL, *J. A. M. A.*, 108:1765 (May 22), 1937. A series of twenty-eight cases suffering from classic postencephalitic parkinsonism were treated with either benzedrine sulfate (benzyl methyl carbinamine sulfate) alone or with the addition of scopolamine or stramonium. Results according to symptoms were as follows:

Symptom	*Lack of Energy*	*Inability to Work*	*Lack of Strength*	*Tremor*	*Rigidity*	*Drowsiness*	*Oculogyric Crisis*
Number of Patients Exhibiting Symptoms	26	28	26	16	26	24	8
Per Cent Improved as to Symptoms	96%	79%	73%	44%	77%	95%	100%

Fifteen, or 53%, were improved from benzedrine sulfate alone and twenty-six, or 93%, reported improvement from benzedrine sulfate with the addition of stramonium or scopolamine. Benzedrine sulfate was found to be most effective when used in combination with these two drugs. Results in oculogyric crisis were particularly striking. This symptom was eliminated in six and greatly diminished in two of the eight patients subject to these attacks.

Additional experiments were tried with ten cases of arteriosclerotic parkinsonism and in a selected group of twenty-two psychoneurotics. Results were not favorable in these conditions and in some cases untoward effects developed.

The average maintenance dose in postencephalitic parkinsonism was 10-20 mg. two or three times a day, although as much as 160 mg. a day for three weeks was taken by one patient without apparent harm. No evidences of tolerance or habit-formation were observed.

ANESTHETIC AGENTS AND METHODS USEFUL IN GENERAL PRACTICE*

JOHN S. LUNDY, M.D.†
Rochester, Minnesota

In general and office practice, the choice of anesthetic differs somewhat from that in institutional practice. Choice is limited for several reasons, such as the desirability of portability in general practice, and in office practice of the patient's being able to return home within an hour or so after being anesthetized. I shall consider the usefulness of various agents and methods from these points of view.



Dr. Lundy

VOLATILE AGENTS

Ethyl ether is undesirable in office practice because of excitement during induction, nausea and vomiting on recovery, and a considerable prostration that does not permit the patient to return home soon afterward; in winter the excessive perspiration which may accompany anesthesia increases the tendency toward catching cold and pneumonia. On the other hand, in the home, ether is very valuable, especially in obstetric cases, because of its relative safety; since nursing care is available there, it is most valuable, although it is not the most pleasant anesthetic for the patient.

With divinyl ether, one may induce anesthesia more quickly and recovery is more rapid. There may be some nausea and vomiting. Although it is more pleasant for the patient, it is not suitable for prolonged anesthesia[1] and because of its increased potency is not as safe as ether to use in general practice either in the office or in the home.

GASEOUS AGENTS

The anesthetic gases are nitrous oxide, ethylene, and cyclopropane. The cumbersomeness of the gas machine which is necessary for the administration of these agents and the usual necessity for an additional person to operate them do not encourage their use in the home from the economic point of view. There are devices which permit the patient to administer the gases herself, and these may be used in the home in obstetric cases if the physician feels that they are necessary. In the usual case, however, they will not be satisfactory from several points of view. In the office one may, of course, use nitrous oxide for procedures that are no more major in character than dental procedures.

* Read before the annual meeting of the Indiana State Medical Association, French Lick, Indiana, October 6, 1937.

† Section on Anesthesia, The Mayo Clinic, Rochester, Minnesota.

[1] Beach, E. W.: Further Experiences in the Scope and Utility of Vinethene Anesthesia in 2,630 Cases. *Current Res. Anesth. and Anal.*, 15:214-217 (Sept.-Oct.), 1936.

Such cases, however, require more attention, and they complicate and confuse the routine of a busy office practice. As far as ethylene and cyclopropane are concerned, there is always the danger of fire and explosion with them, and in the home or office these conditions cannot always be controlled. Yet if the physician feels that he wishes to apply the advantages of these agents in the home or in the office, and if he is near enough to a professional anesthetist who has portable equipment and who is experienced in the administration of such agents, he can obtain this service in cases in which elective procedures are to be carried out and a convenient hour can be arranged for the several parties concerned.

The advantage of nitrous oxide is, of course, that it is relatively safe from the standpoint of inflammability and explosiveness. Ethylene has an advantage over nitrous oxide, except for inflammability and explosiveness, of permitting the use of more oxygen and yet producing anesthesia and some relaxation. Cyclopropane has two advantages over ethylene: it is more potent, and less may be used to produce anesthesia, and much more relaxation may be obtained without the addition of ether. The fact that very small amounts of cyclopropane are used as compared with ethylene is advantageous from the standpoint of portability, smaller cylinders being used. This is especially true when the soda-lime absorption method is employed. Although a canister of soda lime appears to complicate the apparatus, it actually does not because of the reduced number and size of cylinders necessary.

AVERTIN AND COLONIC OIL ETHER

In the office one finds no place for the rectal method of anesthesia because of its prolonged effect and because in safe doses the available agents are not suitable for the production of surgical anesthesia. In the home, however, the use of a mixture of olive oil and ether by rectum has been of service in obstetric cases. Avertin has also found application in cases in which a patient must undergo an operation in the home and the surgeon feels that he wishes to carry it out under local anesthesia but in which the patient is entirely uncooperative. Under such circumstances the surgeon may give a dose of avertin which produces basal anesthesia, and may then proceed to supplement it with a local anesthetic. About the only use for rectal anesthesia in office practice is for the purpose of transporting to a hospital a patient who has been brought into the office as the result of an accident or who has become psychotic and must be brought under control in order to be transported conveniently. In the case of convulsions this method is useful when the patient must be temporarily treated and possibly be transported to a hospital. Under these circumstances, if neither olive oil and ether nor avertin is available, it may be necessary to rely on the use of a barbiturate administered by rectum in capsules. For anesthesia by the rectal method, the estimated dose is first given and this is then followed every twenty minutes by a small dose until the desired effect is brought about.

EVIPAL SOLUBLE AND PENTOTHAL SODIUM

The barbiturates, evipal soluble and pentothal soluble, are used considerably for producing transient anesthesia for short operations. The induction period is short and recovery is usually uncomplicated by nausea, vomiting, or restlessness, although any of these may follow; recovery of consciousness occurs in a period of from one-half to several hours. In office practice the intravenous administration of these agents may be employed if the intermittent method is carried out, which requires an experienced anesthetist. The patient's stomach should be empty, and the bladder and rectum also, if convenient, and there should be no obstruction in the alimentary canal such as intestinal obstruction associated with vomiting. This tends to prevent regurgitation and aspiration of the gastric content and soiling from the bladder and rectum. This method of anesthesia should not be used for children ten years of age or under, or for patients who are suffering from dyspnea either from pulmonary disease or of cardiac origin. The airway must be free and there must be no probability that it will become obstructed during the operation. Therefore, the usefulness of this method of anesthesia in dental surgery is largely limited, and if it is to be used, the patient should, if possible, be lying on his back in a slight Trendelenburg position. If the patient is allowed to go home within an hour after the operation, he should be accompanied by a responsible individual who will treat him as though he were inebriated from alcohol.

In the home, the use of an intravenous anesthetic is justified when its administration is carefully watched and when there is enough assistance so that the physician can be sure that the patient will not develop any respiratory obstruction and that the patient's jaw is sustained throughout the procedure. In order to obtain the best results, the procedure should be short enough so that it will occupy less than five minutes. However, when an experienced person can accompany the physician and attend to the administration of the anesthetic, this method is more convenient from the standpoint of portability than is anesthesia with a gas. The use of a cotton or paper "butterfly"[2] to demonstrate the character of breathing in intravenous anesthesia is a great help in both office and general practice and should always be used if possible.

[2] Lundy, J. S.: A. Method of Minimizing Respiratory Depression When Using Soluble Barbiturates Intravenously. *Proc. Staff Meet. Mayo Clinic*, **10**:791-792 (Dec. 11), 1935.

One advantage of these agents is the fireproof conditions associated with their use. Further justification for their use in the home is any condition of extreme trauma from an accident or fire, or in the case of convulsions from whatever cause. This method may also be used to facilitate transportation of patients who become unmanageable, especially from psychoses. A great advantage of intravenous anesthesia is easy portability, the physician being able to carry in his bag the few articles necessary for the preparation and administration of the agents. In the office, the use of preliminary medication is usually avoided, because the recovery period is thereby prolonged. In the home, preliminary medication is desirable, because the amount of anesthetic necessary is reduced. A point that tends toward safety is to have an attendant or relative constrict the arm of the patient by hand instead of using a tourniquet. In this way there is no possibility that the tourniquet may be left in place and the anesthetic injected into the vein in an overdose before the tourniquet has been removed. I have heard of one fatality occurring in this way.

LOCAL, REGIONAL AND SPINAL ANESTHESIA

Local anesthesia is of the greatest value, probably next to ether, in general practice if the physician will only use it. It is convenient from the standpoint of portability, as one may buy concentrated solutions of the anesthetic in ampules and inexpensive ampules of distilled water. Sterile syringes and needles are easily carried in the doctor's kit. Practically any minor and many major operations can be carried out under infiltration anesthesia. This is especially true in the home where preliminary medication can be used to reduce the patient's nervousness and apprehension. The injection of a local anesthetic is very satisfactory in the reduction of simple fractures[3] and in the treatment of sprained joints.[4] The use of infiltration anesthesia in office practice is of course quite standard, but it is not used as much as it should be because preparation prior to the need for it is not usually made, proper syringes and needles have not been sterilized and ampules of anesthetic solution and distilled water are not at hand. I am sure that if one will make ready these few things and have them at hand, he will find himself using them more and more frequently to the advantage of both himself and his patients.

There are certain methods of regional anesthesia which also may be used to advantage, especially block of the perineal nerves. With the patient in the lithotomy position, either in the office or in the home, 10 to 15 c.c. of 1 per cent procaine solution is injected mesial to the tuberosities of the ischii, and in ten or fifteen minutes anesthesia of the anterior perineum will be brought about. In the female, this permits procedures on the vagina, vulva, and uretha but does not anesthetize the anus; in the male, it will permit manipulation of the urethra and will facilitate cystoscopy and similar procedures. For such operations as circumcision simple block may be used, injecting subcutaneously entirely around the base of the penis together with a slightly deeper injection at the dorsum of the base in order to get the two penile nerves. This makes painless the operation of circumcision or amputation of the distal half of the penis. It is a block which could be used more often, although it is not successful unless the intradermal part of the injection is carried entirely around the base of the organ. In operations on the anus, such as hemorrhoidectomy, infiltration of the tissue to be incised is satisfactory from the standpoint of anesthesia but not always from the standpoint of surgery, because, on account of distortion of the tissue, the exact amount to be excised cannot be estimated. For those who wish to inform themselves, caudal and sacral block will prove most useful in office practice and in the home for practically any procedure on the perineum or urethra. It produces a saddle type of anesthesia and has been used to advantage in operative obstetrics in the home. Many have found it to be useful, and although the technic is exact it is usually clear to the attentive observer.

Spinal anesthesia has been used many times to advantage in the home; if used in office practice, however, the dose must be very small and, since spinal anesthesia may be followed by headache of the lumbar puncture type when the patient resumes the upright position, it is not usually considered desirable in office practice. In the home, when the patient is in bed subsequent to anesthesia and operation for a period of days, it may often be used to marked advantage. Here again, however, the dose should be one that is considered safe, and the method should be avoided for individuals who have marked debility for that is the principal contraindication to spinal anesthesia. If the method is used, there should be sufficient assistance at hand so that the patient's general condition will have the undivided attention of an informed individual who will know what to look for in the way of untoward reactions of pulse, respiration, pallor, and so forth. As soon as any symptoms appear, the surgeon may be quickly notified, and he may see that the proper measures are instituted to treat these conditions. The intravenous use of ephedrine when the blood pressure has fallen alarmingly low is a proper measure. It is not sufficient to inject the ephedrine subcutaneously or intramuscularly. If respiration fails, artificial respiration may be employed or oxygen may be

[3] Leriche, Rene, and Froehlich, Fritz: Traitement de certaines fractures articulaires par les infiltration de novocaine et la mobilisation active immediate. *Presse Med.*, 44: 1665-1666 (Oct. 24), 1936.

[4] Leriche, Rene, and Fontaine, Rene: De la valeur therapeutique des infiltrations peri-articulaires a la novocaine dans les entorses et les arthrites traumatiques. *Presse Med.*, 40:280-282 (Feb. 20), 1932.

administered until a sufficient amount of the local anesthetic has been destroyed and breathing is resumed. Spinal anesthesia is valuable in the hands of those experienced in its use and who recognize its limitations; it is not a method to be used by those who are inexperienced and who must guess concerning the dose and applicability of the method.

Brachial plexus block may be used by those interested and with more than the average information concerning block anesthesia, but usually it is not necessary if infiltration anesthesia is carried out.

Peridural anesthesia is valuable but is not yet commonly used.

It is often of advantage to incorporate epinephrine (adrenalin) or cobefrin with the local anesthetic agent to make the field drier and to slow the rate of absorption. Cobefrin is said to have less systemic effect as far as excitement is concerned, but either of the two drugs will serve when used in proper dilution. Six minims of 1:1000, or 1 c.c. of 1:2600, solution of epinephrine is added to 100 c.c. of a 1 per cent solution of anesthetic agent, or to 200 c.c. of a 5 per cent solution, or to 40 c.c. of a 2 per cent solution. Cobefrin is added in 1:200,000 solution to 1 per cent procaine solution, or 1:400,000 in a 0.5 per cent procaine solution.

There is one point in the use of local anesthetics which is not generally understood, and that is that if the stimulus that travels over the nerve trunk comes from an inflamed area such as an abscess, an increased concentration of anesthetic agent is needed. For example, a 2 per cent concentration may be sufficient for extraction of a tooth, but if the tooth is acutely abscessed a concentration of from 3 to 4 per cent may be necessary to produce satisfactory anesthesia. In tissues surrounding the abscessed area, a 0.5 to 1 per cent concentration is ample for infiltration anesthesia.

Of the local anesthetic agents that have been suggested for use, the one most interesting next to procaine is metycaine. This drug is slightly stronger. A 1 per cent solution of metycaine will produce anesthesia more quickly and the anesthesia will be more profound and prolonged than with procaine of the same concentration. It is also a good surface anesthetic. Individuals who have developed procaine sensitivity or procaine dermatitis will usually tolerate metycaine.

Without doubt the more extensive use of local anesthesia in general practice is to be desired.

COMPLETE REPORTS OF THE FRENCH LICK MEETING ARE PUBLISHED IN THIS ISSUE. IF YOU ARE INTERESTED IN THE WORK OF YOUR ASSOCIATION, TAKE THE TIME TO READ THEM CAREFULLY

ROENTGENOLOGY AS AN AID TO DIAGNOSIS OF LESIONS IN THE UPPER RIGHT ABDOMEN*

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The specialty of radiology, although a rather new branch of medicine, is rapidly becoming highly developed and can perhaps in no other field render more adequate service than in the differential diagnosis of lesions in the upper right abdomen. The sympathetic nervous system is so constructed that a single ganglia of nerve tissue may receive filaments from more than one organ and in turn send out messages to organs other than those already involved by its reflex mechanism. This, together with the close proximity of a large group of vitally important organs in the upper right abdominal quadrant, makes every available method of diagnosis of great importance in this field.



Dr. Nichols

When the internist or surgeon is uncertain about the exact location and type of lesion present in the upper right abdominal quadrant, he should at once consider the advisability of consultation with a radiologist. This should be done, not merely to have a picture made of some suspected organ in this field, but the radiologist should determine the type and method of examinations necessary to obtain the most satisfactory explanation of the patient's symptoms. Too often the radiological examination is useless because some specific procedure was ordered which was entirely inadequate to establish the correct diagnosis. The trained radiologist knows the correct method of approach to these problems and is on the same parity as the internist or surgeon who knows how to make a proper physical examination of the abdomen. I am certain the surgeon or internist would resent having his examination limited to only one organ or to one specific method of examination in order to determine the cause of distress in the painful abdomen and, in the same way, the roentgenologist should not be limited in the extent of his procedures. The proper method of examination not only facilitates the correct diagnosis but also makes it possible to complete the examination in the shortest time with a minimum of expenditure to the patient.

The problems presented by lesions in the upper right abdomen are often complicated and the symptoms may be produced by a malady of more than one of these organs, thus making the symptoms

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† From Cleveland Clinic.

often most confusing. Only a few years ago, the usual daily operative schedule listed two or three exploratory operations in the upper abdomen, but with advances in radiology, it is now rather the exception to the rule when an exploratory operation is scheduled. This is because a fairly accurate diagnosis may be made preoperatively in most instances. After the examination of a large number of patients who have been subjected to from one to three abdominal operations without relief from symptoms, one becomes interested in this subject from the standpoint of diagnosis. No criticism, however, should ever be directed against the exploratory operation unless one is familiar with all the specific details and circumstances of the individual case.

The upper right abdomen may present a bizarre group of maladies. Since the radiological examination plays such an important role in diagnosis, this subject may best be discussed in the sequence of accessibility to roentgen procedures. Therefore, the first measure in the roentgen determination of the cause of symptoms in the upper right abdomen, regardless of the clinical symptoms, should be examination of the lumbar spine, pelvis, and abdominal organs which includes the kidneys, ureters, bladder, liver, and spleen. For this, one film 14x17, may be made or a pair of stereoscopic films. It is necessary that this first examination be carried out before any opaque media is introduced into either the circulation or any of the abdominal organs.

From such an examination, information may be obtained which will give a clue to the organ involved. The first observation should be of the spine which may show any one of the following lesions: some type of arthritis, a postural defect, a neoplasm of the bony spine or of the spinal cord, evidence of fracture, dislocation, or of a ruptured nucleus pulposus. If it is suspected that a ruptured nucleus pulposus has herniated posteriorly into the spinal canal, lipiodol must be introduced into the spinal canal in order that the protrusion of the nucleus may be visualized and its presence and location confirmed. If it is suspected that a tumor is present, measurement of the spinal canal on a line from the base of the pedicle on either side with increased width in a segment of the canal may show the definite location of a tumor.

After ruling out the possibility of a lesion in the spine, the abdomen is surveyed to determine the presence of a calcific deposit. Such deposits may be kidney stones, ureteral stones, a calcification in a tumor or cyst, or a calcification in the gallbladder which may be due to calcium bile or to gall stones. Examination is also made to detect evidence of old irregular, calcified, mesenteric glands caused by tuberculosis or of calcific deposits in the outline of the kidney pelves and calices which are characteristics of old tuberculosis of the kidney. If a suspicious calcific deposit is found, its location must be determined immediately. Calcified glands may be recognized by their irregularity in outline, their size and location, while tumors such as echinococcus cysts, dermoid and ovarian cysts will usually be visualized by the cyst wall and by their location so that identification may readily be made. Calcifications in the region of the gallbladder may usually be identified by making films of the gallbladder itself which will show the stones more distinctly.

Calcifications in the region of the right kidney or ureter must be located very carefully, and for this, stereoscopic films are very valuable. In addition, however, a catheter should be passed into the right ureter and a pyelogram made. In the presence of pale or nonopaque stones, a dense media should be employed for the pyelogram and a pale media for dense shadows. A lateral film often aids in localizing such a shadow. Excretory urography is of aid in visualizing many stones and in showing obstruction of the ureter if it is not complete, but if obstruction is complete the kidney will be nonfunctioning. In a large series of examinations, one is surprised at the number of patients who have urinary calculi without definite symptoms of urinary tract disturbance.

Following these examinations the size, shape, and position of the kidneys is determined. Deviation from normal size suggests the presence of a compensatory hypertrophy, hydronephrosis, or neoplasm. The shape of the kidney is of particular aid in determining the presence of tumors and anomalies such as polycystic kidneys, horseshoe kidney, and other deviations from normal. An aberrant vessel is a rather frequent finding which is accompanied by intermittent hydronephrosis and pain without urinary symptoms. A review of a large series of cases shows that one-third of the patients had been subjected to one or more abdominal operations without relief of symptoms.

In his recent monograph, Gutierrez[1] emphasizes the importance of the recognition of the horseshoe kidney which presents the following syndrome of symptoms: (1) abdominal pain; (2) constipation with or without gastro-intestinal disorders; (3) urinary disturbances. These symptoms were present in 96 per cent of his series of 25 cases of horseshoe kidney. This author believes the symptoms are caused by the isthmus of the horseshoe kidney, which exerts pressure on the abdominal viscera both intra- and retroperitoneally, setting up reflex responses of the solar plexus.

Visualization of the position of the kidney may be helpful in determining the presence of ptosis with hydronephrosis or of torsion of the pedicle of the kidney by rotation, thus producing a disturbance of circulation with subsequent pain. McKim and Smith,[2] in their work on traction of the kidney

[1] Gutierrez, Robert: The Clinical Management of Horseshoe Kidney, New York, Paul B. Hoeber, 1934.

[2] Smith, P. G., and McKiKm, G. F.: Nephroptosis, *Ohio St. M. J.*, 32:223-225 (March), 1936.

pedicle from rotation of the kidney, emphasize that ischemia or hyperemia may result from destroyed circulation. Such a pathological entity may well simulate one of the more common painful diseases of the upper right abdomen.

With these examinations completed, it is evident that this first initial examination has produced much valuable information so that it can probably be determined which organ is producing the symptoms and further examinations can then be instituted. If, on the other hand, this first survey reveals no definite abnormalities, plain films of the gallbladder region should be made and cholecystographic dye administered to determine the function and the presence or absence of nonopaque stones. This may be carried out satisfactorily by giving the patient a standard, prepared cholecystographic dye in the evening and making the roentgen examination of the gallbladder the following morning after a period of about 14 hours. If the gallbladder is well visualized at this time, the administration of a barium mixture and a complete study of the stomach and duodenum by fluoroscopy may follow immediately. If the gallbladder is nonfunctioning, administration of the dye may be repeated the following night. With careful observation for the presence of periesophageal hernias and follow-up films of the small intestines for diverticula, adhesions, and lesions of the small intestine, examination is then made in 24 hours to determine the motility of the intestinal tract. This is followed by a colon enema with films made immediately after the injection and also after voluntary emptying of the bowel. If a suspicious lesion is present, such as a polyposis, an air injection of the colon is done at this time. This will often visualize such lesions and may also be helpful in the localization of a neoplastic growth, particularly in the sigmoid and bowel. Usually the appendix may be visualized at the second period. At least the cecum is seen and the presence of tenderness or fixation may often be helpful in the diagnosis of a chronic appendicitis, regional ileitis, or other lesion about the cecum. The roentgen examination of the colon is the most valuable method of diagnosis of both functional and organic disease of the colon, except perhaps lesions in the lower sigmoid and rectum which may be visualized directly by proctoscopic examination.

After such an examination, the cause of the patient's complaint has usually been determined. There are, however, some lesions which may not be demonstrated by radiological examination. One which is perhaps frequently overlooked is gastric crisis due to tabes and another is angina. Careful consideration should also be given to the possibility of pancreatic disease which is quite often overlooked.

It is not possible to give details for all examinations to determine lesions outside the gastro-intestinal tract. However, if a suspicious mass be present in the upper right abdomen and if this cannot definitely be identified, the use of excretory urography has become of extreme importance in either incriminating or ruling out the kidney.

It has been our experience that lesions in the urinary tract accompanied by upper abdominal symptoms are most confusing and often these may not be determined by exploratory operation. If a patient with a stone in the ureter, which is causing reflex spasm of the colon, has only a barium examination of the colon, a spastic colon will be seen, and the urinary stone—the cause of the trouble—may be overlooked entirely.

It is impossible here to discuss in detail all the problems involved in a survey of upper right abdominal symptoms, but it must be emphasized that a systematic examination must be done in order that lesions may not be obscured by the promiscuous use of opaque media and also to call attention to the fact that in many instances an exploratory operation will by no means divulge the cause of the patient's complaint. Therefore, a plea is made that the roentgenologist be considered as a consultant and that he be regarded as any other consultant in medicine. If this is done, many satisfactory results will be obtained.

ABSTRACT

FERTILITY AND CONTRACEPTION IN NEW YORK AND CHICAGO

Raymond Pearl, Baltimore (*Journal A. M. A.*, April 24, 1937), compared certain aspects of the reproductive histories of 3,951 women dwelling in New York City and 3,589 living in Chicago. All the women in both samples were living in wedlock, had been married only once, and were free of any recognized form of gynecologic disease. The age distribution of the women was substantially similar in tbe two groups. 1. The white women of the Chicago sample appear to be somewhat less fertile on the average as a group than the white women of the New York sample, whether measured by pregnancies experienced or live births produced. 2. Attempted contraception was more frequent among the Chicago than among the New York white women, the percentage of contraceptors being 64 in the former city and 53 in the latter. 3. As indicated by average lapse of time between marriage and the beginning of first pregnancy in primiparas, contraception as actually practiced was more effective among the New York women than among the Chicago women. The same result, but with a smaller quantitative difference, characterized the relative effectiveness of contraception as practiced by the multiparas, when measured by the criterion of the average number of years of married life spent in the non-pregnant state. 4. As measured by the degree of lowering of pregnancy and live birth rates per hundred years of exposure to the risk of becoming pregnant, the Chicago white women again were, as a group, to a substantial degree less efficient contraceptors than the New York women. 5. Reproductive wastage rates in general, and induced abortion (self or criminal) rates in particular, were lower among the Chicago white women than among the New York women. 6. The data from both cities indicate that women practicing birth control resort to criminal abortion more frequently than do noncontraceptor women. 7. Attempted contraception was less frequent and less effective among the Negroes than among the whites in the samples from both cities.

INFLAMMATORY DISEASES OF THE SMALL INTESTINES (SO-CALLED REGIONAL ILEITIS)*

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In a recent editorial, Dr. W. C. Alvarez[1] deplored the almost unbelievable fact that so many generations of physicians have given little thought to the functions or the disorders of our principal digestive organ—the small intestine. We have been concerned only with the stomach, the duodenum, and the terminal three or four feet of the intestinal tract—the colon and rectum. There remain about twenty feet of alimentary tract which perform the major duties of digestion. Upon reflection, it must be realized that any organ which carries on such vital functions is deserving of consideration as to its form, functions, and abnormalities.

Medical history abounds in instances of the accidental discovery of pathologic conditions, many of which were not fully understood nor thoroughly investigated until centuries later. The early pathologic investigations of Morgagni and others revealed dramatic gross changes in the alimentary tract which were subsequently allied with symptoms and physical signs so that clinical entities came to be recognized and diagnosed and interpreted in terms of these pathologic changes. Later, some of these conditions were further investigated and etiologic factors unearthed which made possible the classification of such conditions into true disease concepts. In other conditions, such as peptic ulcer, no etiologic agent ever has been discovered; yet we have become accustomed to consider this disorder as a true disease.

The subject of inflammatory disease of the small bowel has grown according to this elementary formula. Occasional cases have been recorded in medical literature for many years. From time to time new cases have been added, and at least one comprehensive review of the literature appeared prior to our present active and intense interest in the subject.[2] Every surgeon of wide experience can recall operating upon a young man or woman for appendicitis or intestinal obstruction, and finding what appeared to be a neoplasm of the small bowel, but no one was able to anticipate this condition and only a few were aware of its true pathologic nature. Much credit, if not the distinction of priority, must therefore be attributed to physicians[3] who were able to detect uniformity in such cases and to evolve from their observations a group of clinical, pathologic and diagnostic criteria which make it possible to anticipate the presence of that condition which is at this time the subject of much interest and which is undergoing so much variation in name.

Terminal or regional ileitis, hypertrophic or cicatrizing enteritis, benign or non-specific granuloma are some of the terms which imply a productive or hyperplastic inflammation of the small intestine. We now know that the lesion is not always confined to the ileum, though it is more frequent in that portion of the bowel. Hence, the term ileitis describes the majority but not all of the instances of this disturbance. This condition is not a new disease. Such lesions have simply been mistaken for malignancies or for specific granulomata such as tuberculosis or syphilis. We now realize that the latter diseases are extremely rare as further studies confirm the non-specific nature of socalled ileitis.

PATHOLOGIC CHARACTERISTICS

In the group of cases first reported by Crohn and his associates[3] only the most advanced clinical and pathologic picture was observed. These men studied fourteen patients in whom a more or less long-standing condition existed. More than half of these patients had been operated upon for appendicitis. Many of them had developed external fistulæ which failed to heal. Most of the patients had symptoms of sub-acute intestinal obstruction and were chronic invalids. In this group may be seen the results of long-standing inflammatory disease of the small intestine. All of them had been ill for at least a year. The lesion was found immediately proximal to the ileo-cecal valve, and extended for a variable distance up the ileum, sometimes for as much as sixteen inches. The diseased segment was thickened, red, and edematous, and upon palpation it felt heavy and indurated. The mesentery was also thickened and contained enlarged glands. In these advanced cases, fistulous tracts to other organs and to the outside were frequently encountered. Chronic perforations into other organs had taken place and in some instances several such fistulæ involving the colon and other loops of small intestine were discovered. In those patients who had previously been operated upon, intractable external fistulæ were often present. Upon incising such a segment of bowel, it was found to be markedly thickened. The mucosa showed patchy destruction with the formation of linear and transverse ulcers. Sometimes regeneration had begun, producing a cobblestone appearance. Microscopically the walls of the bowel showed all stages of non-specific inflammation, with marked fibroblastic changes. Giant cells, thought to be of the foreign body variety and due to the presence of organic bowel content, were frequently encountered. The presence of these cells was considered by many

* Presented before the Section on Medicine at the French Lick Session of the Indiana State Medical Association, October 5, 1937.

[1] Alvarez, Walter: New Knowledge About the Functions of the Small Bowel. *Am. J. Dig. Dis. and Nutr.*, IV, 335 (July), 1937.

[2] Tietze: Die Entzindliche Geschweitshe des Dickdarms. *Ergeb Chir. u. Orph.*, XII, 211- 1920.

[3] Crohn, B. B.; Ginzburg, Leon, and Oppenheimer, Gordon: Regional Ileitis. *J. A. M. A.*, 99:1323, 1324, October, 1932.

to be an indication that the process was tuberculous in origin. Intensive efforts to show tubercle bacilli by all methods have failed, and tuberculosis is no longer considered among the etiologic possibilities. There is no doubt that many such cases have been considered to be hyperplastic tuberculosis in the past, but in these cases there usually is no clinical evidence of active pulmonary tuberculosis and all laboratory studies have failed to demonstrate the presence of the bacilli. Other specific granulomata have also been carefully ruled out.

In the past five years, many doctors have been watching for this disease. In this manner, new facts concerning its nature have been discovered. The first significant addition to our knowledge of these small intestinal lesions was that the disease was not necessarily confined to the terminal ileum.[4] Cases involving higher segments of ileum were soon found. Eventually jejunal lesions were discovered and in a case recently operated upon in an Indianapolis hospital, the identical lesion was found involving the duodenum. Three years ago we were able to report nine cases in which the process definitely involved the cecum as well as the terminal ileum[5]; thus we learned that the ileo-cecal valve was not a barrier to the progress of this lesion. Such combined lesions of the cecum and terminal ileum are not to be confused with severe ulcerative colitis in which a retrogression into the ileum may occur.

Of greatest importance in point of practical value is the fact that the areas of diseased bowel may be multiple and may be widely separated by normal intestine. Hence it behooves the surgeon to explore the small intestine with extreme care before closing, if he hopes to cure a case of ileitis. These so-called "skip" lesions may be far apart and may be in earlier phases than the original site in the lower ileum. We definitely feel that such a focus may be so superficial as to make its detection by palpation and inspection impossible. This fact is undoubtedly the explanation for some of the postoperative recurrences which are worrying us so much in these cases.

The pathology of this disease is, therefore, that of a non-specific inflammation involving all layers of the intestinal wall and characterized by the early infiltration of fibroblasts, thus leading to thickening, induration, and stenosis with marked mucosal destruction.

ETIOLOGIC FACTORS

Some mention has been made of the work done to bring out a possible relationship between regional ileitis and tuberculosis as well as the other specific granulomata. The question of a possible relationship to other diseases has also been considered. The fact that so many of the early cases had been operated upon for appendicitis led to an investigation into the case histories to determine what the true status of the appendix was. In many of them it was found that the mass in the ileum had been felt at the time of the operation, but had been left in place. The appendices in these cases showed no acute inflammation. In the many cases which have been observed in all parts of the country, no evidence to substantiate a possible causal relationship to appendicitis has been found.

Of far greater interest and significance are the recent observations of a large group of patients who had suffered from acute bacillary dysentery of the Sonne-Duval type three years ago.[6] A follow-up study of these patients has shown that a small number of them have developed small intestinal lesions similar to those of so-called regional ileitis. One is very much in the dark in discussing bacillary dysentery from any aspect. It is a disease which we have neglected because we considered it to be limited to tropical climates. There is no doubt that bacillary dysentery of the Flexner group is widespread and though its identity is difficult to prove, it should be searched for carefully in all diarrheal cases and its existence should be reported.[7] At any rate, it seems certain that in some cases of bacillary dysentery a regional cicatricial enteritis may ensue. This by no means proves that all such lesions in the small bowel are due to dysentery, but further studies along this line are clearly needed.

Many attempts to isolate a virus or other obscure causative agent from the diseased tissues and the mesenteric lymph nodes have been unsuccessful. Those who believe strongly in the theory that long standing functional disorders may lead to organic changes have suggested that ileitis may be due to chronic intestinal hypermotility of neurogenic origin. Certainly this idea does not coincide with the pathologic evidence. Though a functional element may exist in these cases, it is difficult to say whether it is a causative factor or a result of the disease. One can only say at present that the etiology of inflammatory diseases of the small intestine of this type is not known. Nonetheless, a sufficiently definite clinical and pathologic uniformity exists to warrant our regarding this group of cases as a clinical if not a true disease entity.

CLINICAL CHARACTERISTICS

It is essential for the recognition of any disturbance to have it in mind when taking the history or upon examining the patient. One must, therefore, be familiar with the varied clinical picture presented by cases of inflammation of the small intestine. The patient will in more than half the cases be a young adult, usually between

[4] Crohn, B. B.: The Broadening Conception of Regional Ileitis. *Am. J. Dig. Dis. and Nutr.*, I:97, 99 (April), 1934.

[5] Crohn, B. B., and Rosenak, B. D.: A Combined Form of Ileitis and Colitis. *J. A. M. A.*, CVI:1 (Jan.), 1936.

[6] Felsen, Joseph: New Clinical Concepts of Bacillary Dysentery. *A. J. Dig. Dis. and Nutr.*, III, 86 (April), 1936.

[7] Crohn, B. B.: Endemic Dysentery. *A. J. Dig. Dis. and Nutr.*, III, 784 (Dec.), 1936.

twenty and forty years of age. A few cases in childhood have been reported, but one may expect to find this disease rarely in children and in the aged.

Just as prolonged observation has extended the morphological concepts of this disease, so has the clinical picture increased in variety. The disease should now be recognized long before it has reached the advanced stage originally described. I have seen no case in the past two years which has progressed to the fistulous stage, nor have many cases been seen in which appendectomy preceded the diagnosis. It is unfortunately true that many cases are still diagnosed on the operating table, but even this fact represents progress and now that surgeons have learned to recognize the disease in the abdomen, we should be ready and able to suspect and prove its presence preoperatively.

The outstanding symptom of ileitis is abdominal pain. It may be severe and sudden in onset and of distinctly colicky nature. In a case of this type, however, accompanied by fever, leukocytosis and tenderness in the right lower quadrant, one is entirely justified in considering it to be a case of appendicitis and operating promptly. In most instances, the onset is not so sudden and dramatic as in appendicitis and differentiation is possible. In a recent typical case, there was a two year history of moderate but definitely colicky pain. This patient, a girl of twenty, had a temperature of about 100 degrees and had a tender mass in the right lower quadrant. The thing that took her to the doctor was an increase in the severity of the pain with slight abdominal distension. These changes undoubtedly were due to the gradual development of stenosis. The pain may, therefore, vary in intensity but will almost always be cramping in character at some time in the history. It is always a good rule to regard cramping pain as significant until proved otherwise.

Fever is present at some time in all cases and here again we encounter considerable variation. Low grade daily elevations in the mild or chronic cases, sharp rises in the sudden and severe cases and sometimes septic temperature in the complicated or perforated cases may occur. In the average case the temperature will be around 101 to 103 and will be more or less constant.

The effect of this disease on the patient's bowel habits is likewise extremely variable. Originally the disease was considered to be a distinctly diarrheal entity. Patients seen in recent months have occasionally presented constipation. However, some change in the bowel habit is almost certain to occur and some degree of diarrhea is almost the rule. It is occasionally quite severe but rarely presents the extreme urgency of the diarrhea of ulcerative colitis. The number of stools may be from three to six a day. The stools are usually semi-solid or mushy and do not contain much mucus or gross pus and blood. Physicians would do well to suspect ileitis in all cases of chronic diarrhea in which the tenesmus and frequent watery, bloody stools of ulcerative colitis are absent. With the development of the obstructive stage of the disease, constipation may replace diarrhea.

Nausea and vomiting are not uncommon symptoms even in early and mild cases, but are much more common in later stenotic phases of the disease.

Leukocytosis is never extreme in uncomplicated cases, but usually exists during some part of the disease. Many very mild cases show no change in the blood count. Anemia is also present in most active cases and varies considerably according to the loss of blood and interference with nutrition. It is always of the microcytic type.

In a general way, these patients present weakness, emaciation and weight loss in proportion to the duration and severity of their lesion. They are also usually apathetic and mentally depressed. They may present the posture and gait of those suffering from peritoneal irritation.

Upon examination of the abdomen, the physician's suspicion of a small bowel lesion, already aroused by a history of chronic abdominal colic, fever, and four or five mushy bowel movements daily, should be readily confirmed by the discovery of a tender mass in the right lower quadrant. There will be much muscular resistance and great care may be required before satisfactory palpation is permitted. The mass may be elongated or round. It has been likened in some cases to a sausage. In simple cases it will be slightly movable. The size of the mass will depend upon the extent of involvement of the lesion and may be very large in cases with cecal involvement. In cases which have gone on to fistula formation, the mass may be fixed and indefinite in outline. The absence of a mass does not entirely exclude ileitis from the list of diagnostic possibilities in a patient presenting such a clinical picture.

DIAGNOSIS

Once suspected, the diagnosis of a small intestinal lesion depends upon the cooperation of a roentgenologist who has investigated the subject of small intestinal radiology and is familiar with the technic required and the interpretation of the picture produced.[8 9 10]

The first step in the study is to give the patient a barium enema. If the individual case permits, this should be done only after proper cleansing of the colon by castor oil followed by non-irritating enemas. In many cases a deformity or narrowing of the cecal tip will be seen. This may be due to spasm only, and may not indicate the presence of actual disease distal to the ileo-cecal valve.

[8] Goldfarb, S. J.: The Roentgen Diagnosis of Lesions of the Small Intestine. *N. Y. State J. Med.*, 34:500, 505 (June), 1934.

[9] Kantor, John L.: Regional Ileitis—Its Roentgen Diagnosis. *J. A. M. A.*, 103:2,016, 2,020 (Dec.), 1934.

[10] Jellen, Joseph: Regional Ileitis. *A. J. Roent. and Radium Therapy*, 37:190 (Feb.), 1937.

However, we are seeing more cases every day in which the disease has extended into the cecum and often on up the ascending colon. It is often possible to fill the terminal ileum itself by means of the barium enema in which case a definite narrowing of a varying length of the intestine may be seen. This change may be extreme in stenotic cases so that the shadow produced by the ileum resembles a piece of string. This resemblance has led to the belief that this so-called string sign is pathognomonic of terminal ileitis, but this is by no means true. The shadow of the barium-filled appendix must not be confused with that of a diseased segment of ileum.

Following the enema a barium meal examination should be carried out. The success of this procedure in the diagnosis of small bowel lesions depends upon frequent observations for a period of six to eight hours. The patient should remain in the x-ray department for the entire day and fluoroscopic observations as well as serial films should be made at no more than two-hour intervals. The terminal ileum is best demonstrated between four and eight hours after ingestion of the meal in most cases. It is important to see this segment at each examination since a spasm of the terminal ileum may resemble a stenosis but is not apt to be seen repeatedly. The most important roentgen sign of a small intestinal inflammation is narrowing of the diseased segment. The extent of this change varies considerably. It may only consist of a slight reduction in caliber with smoothing of the normally serrated edges. More often a marked degree of narrowing with smoothing of the edges is observed. The caliber, as above mentioned, may be no more than that of a piece of string. The length of involved bowel also varies greatly. One may be certain of lesions as long as twelve to eighteen inches, but frequently the surgeon will find that the length of involvement has been underestimated. Another very important sign which is associated with narrowing is dilatation of the loops proximal to the lesion. Any unusually dilated loop of intestine signifies the presence of a narrowed segment distally. If dilatation is the only sign elicited, the examination should be repeated with greater care to isolate and separate the loops of bowel manually under the fluoroscope. It is very easy to miss lesions in the upper ileum and jejunum because of the marked overlapping. Delay in evacuation of the terminal ileum is another significant sign. The normal terminal ileum should contain no barium at the eight hour observation. Certainly retention in the terminal segment at nine or ten hours warrants further investigation. Delay in emptying occurs a little more frequently in cases with cecal involvement. Occasionally irritability of the cecum occurs in cases with superficial or mucosal lesions. This leads to rapid emptying of this portion of the colon. This phenomenon when associated with ileal delay is known as Stierlin's sign and has long been considered diagnostic of ileo-cecal tuberculosis. It is not, however, pathognomonic of this disease.

The x-ray diagnosis of inflammatory lesions of the small intestines and of the ileum and cecum particularly should not be missed. There is no mystery about the technic of the studies and there is nothing difficult about the interpretation of findings. The important element in this type of investigation is patience, frequent observations and serial films. A number of new ideas to simplify small intestinal studies are at present under investigation, but nothing of definite value has yet been evolved.

DIFFERENTIAL DIAGNOSIS

The diagnosis of this so-called hypertrophic regional enteritis depends upon all of the above clinical and roentgen observations. The x-ray does not make a specific diagnosis, and differentiation from other ulcerating and stenosing lesions must be made on other grounds.

Tuberculosis of the intestines occurs in two forms. The most common is a superficial ulcerating enteritis which may occur very widely. A less common form is hyperplastic in character and occurs most frequently in the ileo-cecal region. Intestinal tuberculosis does not occur except in the presence of pulmonary tuberculosis and probably only when the lesions in the lungs are active and open. It is most difficult to prove bacteriologically during life that an intestinal lesion is tuberculous. In the presence of an active pulmonary lesion one would be forced to consider such a clinical picture as heretofore presented as due to tuberculosis until microscopic sections and animal inoculations were made.

Other specific granulomata such as Hodgkin's disease and lymphosarcoma may involve the small intestine. Other evidences of these diseases usually are present, but it is possible that definite differentiation would depend upon pathologic studies. I have seen one case of lymphosarcoma of the small intestine in which no other evidences of the disease existed and no more definite diagnosis was possible than an ulcerative lesion of the small intestine.

Carcinoma must also be considered in differentiation from ileitis. The patient is very apt to be much older, but here again when the involvement is in the terminal ileum and cecum, the differentiation may be very difficult. A recent case seen with Dr. Crohn represented a typical picture of long-standing ileitis. The x-ray showed extensive and separated lesions involving a large portion of the ileum. Upon opening the abdomen, this patient was found to have three separate and extensive carcinoid tumors of the ileum. No way of making a preoperative diagnosis of this condition is known at present, but this is a possibility that must be given some consideration.

Right sided or "segmental" colitis may be quite confusing clinically, but in such cases, as in one recently observed, the barium enema revealed

marked involvement of the cecum and ascending colon, but the barium meal showed a perfectly normal small bowel throughout. Amebic colitis may also present the same differential problem, but here both laboratory and x-ray aids to differentiation exist.

TREATMENT

It is in direct defiance of the rules of logic to form generalizations from a given experience until an infinite number of observations have been made. In the five years of study following the reintroduction of the concept of small intestinal diseases into medical thought, an insufficient number of cases have been reported to enable us to generalize concerning the proper treatment of this disease.

The procedure favored by Dr. Crohn[11] and by Dr. A. A. Berg, who has probably operated upon a larger number of these cases than any other surgeon, is radical resection of the diseased bowel. It is of extreme importance to resect well above and below the involved portion. In most cases, the cecum and ascending colon must be sacrificed. An anastomosis of normal small bowel is then made to the transverse colon or the sigmoid. A two-stage procedure is favored. The anastomosis being done first, it is followed in three or four weeks by resection. This procedure should be *curative* if the entire lesion has been resected. Careful search for skip lesions must be carried out.

The functional effect of this operation varies according to the length of bowel removed. The patients usually have two to four soft movements daily, but pain is gone and their general health improves rapidly.

There seems to be no choice except to perform a wide resection in advanced and stenotic cases. Some men are of the opinion that the very early, mild cases may heal spontaneously. I have had no personal accquaintance with such a case. One patient in whom the lesion was found at operation and left in place seemed to be entirely well for several months, but subsequently appeared at another hospital and was found to have an extensive and advanced lesion. Further observations must be reported before one can answer the question of the possibility of spontaneous remission of the disease. It seems doubtful that such an outcome will occur often and certainly any patient who has been found to have a small intestinal lesion of this type during an operation for another abdominal disease deserves careful watching over a long period of time.

Palliative surgery has been carried out in many cases and is advocated by excellent surgeons. These men consider short circuiting operations leaving the lesion in situ and anastomosing healthy ileum to healthy colon to be the operation of choice. The results vary considerably. Some patients have improved markedly. Others have progressed as though unoperated to chronic invalidism, reoperation, or death. One can not say what case will respond and what case will not, but the results do not compare favorably with those of resection when carried out by skillful hands.

In Koster's[12] review of the literature last year, 126 cases were analyzed. The general mortality of the disease was 14 per cent. Of the 65 cases which were resected, recurrences developed in ten cases, but six of these were reported as cured by re-operation. Fifteen cases were treated by side-tracking operations and cures were reported in thirteen of these. No follow-up study of sufficient length is available, and one should not draw hasty conclusions from any of these figures.

Fourteen cases were unoperated and eight were reported as spontaneous cures. The remaining six cases were subsequently operated upon.

Only one medical procedure seems to be of much importance in the treatment of ileitis, that being the absolute restriction of roughage from the diet. Medicinal therapy can only be symptomatic. Belladonna and opium are used freely for prevention of pain and control of diarrhea.

Our experience is as yet too limited to permit conclusions as to what is the best treatment for ileitis. It certainly must vary with the individual case, but extensive resection at this time seems to offer the best hope for a lasting cure. The risks are not too great, and the functional results are satisfactory. One need not hesitate to recommend this procedure to the patient if at the same time he can select the surgeon.

226 HUME MANSUR BUILDING.

DISCUSSION

WILLIAM R. TINDALL, M.D. (Shelbyville): A review of medical literature reemphasizes what has been said, "that which is supposedly new in medicine may not be new but merely rediscovery."

In the past four years the disease regional ileitis has been diagnosed with increasing frequency. In 1932 there was reported what was believed to be a new granulomatous lesion of the small bowel which they thought confined to the ileum. They gave the name regional ileitis. The picture they described was so striking that it seemed hardly possible that we have overlooked it so many times.

A study of the symptoms of the disease as it occurs enables us to define three types: the first resembling acute appendicitis, the second colitis, the third chronic intestinal obstruction.

The patient with a symptom complex similar to appendicitis may be diagnosed only at operation. The appendix may or may not be involved. The true diagnosis may not be made until a complete roentgenologic gastro-intestinal examination has been made. The disease has been pointed out affecting, as a rule, young people. The history frequently covers a long period of gastro-intestinal disturbances.

(Continued on Page 596)

[11] Crohn, B. B.: The Prognosis in Regional Ileitis. *Am. J. Dig. Dis. and Nutr.*, III:736 (Dec.), 1936.

[12] Koster, Harry; Kasman, Louis, and Sheinfield, William: Regional Ileitis. *Arch. Surg.*, 32:789-809 (May), 1936.

REMINISCENCE

PATRICK H. WEEKS, M.D.*
Michigan City

As a rule, when an emergency call is received from the prison in the wee hours of the night, I seldom take the time to find out what the trouble is until I reach the hospital. It might be that someone is feigning a desperate heart attack in order to be excused from work on the following day. Or, perhaps, the deadly routine of life behind prison walls has brought on a suicide attempt or an hysterical outbreak. Occasionally a most unusual situation is encountered, and such was my experience on a beautiful spring night a few years ago. It was the familiar voice of the night captain calling over the telephone: "Come to the hospital as soon as possible."

With no idea as to what the trouble was, but confident that my services were seriously needed, I rushed to the hospital, and as I entered the building, the night guard rushed up exclaiming, "Doc, you sure got here in good time."

"Yes," I remarked. "What is the trouble?"

"Why, everybody is drunk!" the guard informed me.

"Do you mean the hospital help?" I asked in astonishment.

"Yes," the guard insisted. "Mike, the head cook, got on a rampage and they took him to the solitary cell only a few minutes ago. They are all drunk as sailors. Even old Andy Jenkins is so liquored up he can hardly walk. He's back there now dancing the hula-hula."

Well, I surmised, if old Andy Jenkins, my faithful and efficient nurse for fifteen years, was participating in a drunken spree, then the officer surely did not exaggerate matters. But I was soon to find out, for presently Andy came up the corridor, weaving back and forth. He was grinning sheepishly as he approached me standing in the office door. "Doc," he blurted out, in a silly drawl, "everything is sure topsy-turvy . . ."

"I can see that all right," I said, with an air of disgust and astonishment.

Calling Andy into my office, I questioned him thoroughly in an attempt to find out what he and the others had been drinking. Andy's tongue was so thick he could hardly talk, yet he insisted that no one had been drinking intoxicants of any kind.

After failing to obtain any information from quizzing Andy, I proceeded to Ward Two, where I had been informed that the men had become noisy and excited and that a fight was brewing. Upon reaching the ward, I was utterly amazed at the conduct of some of the men.

One husky young fellow was strapped to a chair in a straight-jacket. He was swearing like a madman and threatening to kill everyone around him for placing vermin in his bed. Another had torn up the blankets from his bed and had started for the door with the mattress thrown across his shoulder, insisting that he was moving to Kokomo.

The conduct of several others was equally as strange. Some were picking bugs from the bed linen, brushing flies from the wall, and chasing butterflies. One man had crawled under his bed to escape from the animals and snakes he imagined he saw crawling about the ward.

In making a hasty examination, one of the first symptoms that impressed me was that the pupils of the men afflicted with the strange disorder were enormously dilated, and between periods of excitement they all complained of extreme dryness of the mouth, inability to swallow, and pounding of the heart. I had examined only a few men when I became thoroughly convinced that we were dealing with some form of drug poisoning and not alcoholic intoxication, but this fact did not allay my fears and embarrassment. The idea of twenty-five of my hospital workers engaging in a "hop" orgy seemed infinitely worse than if they had been intoxicated, but the moral issue was soon forgotten when approximately one-half of the number became desperately ill. How did I know but that several of the men would be dead by morning?

I realized that in order to administer the proper antidote, it was necessary first to determine the nature of the poison. This proved to be an extremely difficult problem. However, after four or five hours of painstaking investigation, I had determined definitely what drug had been taken and how it was administered.

Hamburger sandwiches and boiled potatoes were the main dishes for the evening meal. Those who had not eaten sandwiches showed no symptoms of having been poisoned. The cook insisted that the sandwiches were of excellent quality and could not have caused the trouble. Nevertheless, the investigation was continued along this line and eventually the theory proved to be correct. Ground parsley had been used as seasoning for the hamburger. But what the cook thought was parsley unfortunately turned out to be powdered stramonium leaves. The label on the package reading "stramonium" had been accidentally lost and the package was delivered to the hospital kitchen instead of to the drug-room.

* Physician to the Indiana State Prison, Michigan City.

DIRECTORY NUMBER NEXT MONTH. NAMES OF ALL MEMBERS AS OF NOVEMBER 15, 1937, WILL BE PUBLISHED.

EFFICIENCY OF THE EYES

CARL J. RUDOLPH, M.D.
South Bend

A discussion of sight and the factors upon which it depends is of great interest to the general practicioner, particularly when industry and society in general demand good vision.

Schools, realizing the necessity of good vision as a means to develop the mental faculties of their students, continually stress the value of prompt examination and early treatment where such is needed. In fact many schools, keeping abreast of present-day trends, have sight conservation classes, so that children handicapped by visual impairment may be given special attention. Factory employers know from experience that the increased efficiency of their employees and a corresponding decrease of accidents among them are the results of good vision, proper illumination, and the elimination of glare.

As increasing demands are being made on the physician to cope with these problems, I offer the following observations as interesting and enlightening advancements in opthalmology regarding factors which have to do with the efficiency of the eyes.

VISIBLE LIGHT

It is common knowledge that light travels in waves and at the rate of 186,000 miles per second. Few persons know, however, that only a small part of light can be seen, that is, visible light which stimulates the retina so as to be of interpretative value to the brain. This range averages from 7,250 to 3,970 Angstrom units. Above in the energy spectrum are the infra red light (7,250 to 1,000,000 A.U.), the wireless and the electromagnetic oscillations. Below are the ultra-violet rays (3,970 to 136 A.U.) as well as the x-rays, gamma or radium, and cosmic rays.

ILLUMINATION

Illumination requirements depend entirely on the type of work in which the patient is engaged.

Let us set down some principles: reading average, 5-10 foot candles; fine work, 20-30 f. c.; in instances where the patient is working with a dark material against a dark background, for example a tailor with black thread and black material, as high as 50 foot candle-power may be required. Of course the source of illumination should not be visible to the patient, nor should it flicker.

And the sun at zenith is 9,600 f. c.

The intensity of illumination can be determined by the use of a photo-electric cell.

It is true that the walls of a room reflect and absorb the light rays depending on their color and shade. Lighter colors reflect and darker colors absorb the light. Glare is to be avoided, because it gives negative after-images and is quite fatiguing to the eyes.

ADAPTATION

Adaptation of the eyes is required for the best vision. A photopic eye is one adjusted to light. Such adjustment usually requires several minutes, though most of the adaptation is accomplished in the first three to five minutes. A dark-adapted eye is scotopic and requires a somewhat longer time for adaptation. An example will illustrate: enter a theatre after having been out in the bright sunlight and try to find a seat. Since, however, the screen is light, not dark, it is more quickly and easily seen.

MEDIA OF THE EYE

The vision of an individual also depends upon: 1. The clearness of the media of the eye; 2. The index of refraction of media; 3. The radius of the curvature of the cornea and lens; and 4. The length of anterior posterior axis of the eye.

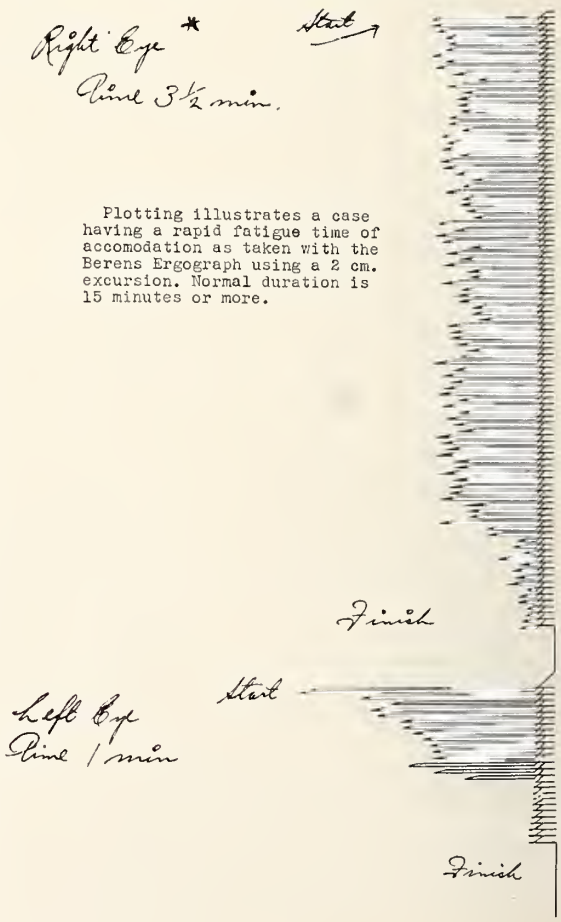
Examples are:

1. Opacity of lens, cornea or vitreous.

2. Diabetes increases the index of refraction and therefore the patient is more myopic.

3. Keratoconus or lenticonus rapidly converge the rays of light and the patient is quite nearsighted.

4. An elongated eye is a myopic eye, and a



short eye a hyperopic or far-sighted eye, provided other factors are equal.

In refraction usually only the refractive error of the eye is taken into consideration. However, cognizance should also be taken of several other factors:

1. The near point of convergence: If the converging power is more distant than 75 mm., it will have to be strengthened by converging exercises, because the eyes have to converge as they accommodate for near work, requiring a definite relationship between the two. The eyes have to accommodate three diopters for one-third of a meter, the average reading distance, and they also have to converge three meter angles. This should be noted: The near point of convergence in presbyopic patients is normally more than 75 mm.

2. The range of accommodation: If it is good in simple hyperopia it will give normal vision with an excessive amount of accommodation. If it is poor, there is a rapid fatigue, especially for near work.

3. The rapidity of the rate of fatigue of accommodation or convergence can be demonstrated by the Beren's Ergograph, as shown by plotting. The range of accommodation or the convergence may be normal, but if this cannot be sustained, asthenopic symptoms may result.

4. The difference in retinal size image or anisekonia can be determined by the opthalmoeikenometer. A retinal size difference of 1.5% or more overall or meridional may give difficulty in fusion and result in one or more of many asthenopic symptoms. A difference of three diopters in the refractive error of the two eyes causes a difference in the retinal size images. Over three per cent in size difference will give rise to pronounced difficulty as a rule.

To make for more serviceable vision several types of lenses have been produced:

1. The ordinary lens for far or near-sightedness.

2. Contact lens for high myopia or keratoconus.

3. Telescopic lenses to magnify the image of an object, so that defective eyes can see somewhat more. A visual acuity of 20/200 can usually be improved to 20/100 or possibly more.

4. Anisekonic lenses to correct a difference in retinal size images.

Even though all the aforesaid factors are normal, yet the patient may not have perfect vision, owing to a muscle imbalance (heterophoria or heterotropia). These muscle anomalies are due to one of three conditions of the extra-ocular muscles: 1. Hypertrophy; 2. Over-stimulation; or 3. Insertional anomaly giving the muscle a mechanical advantage or disadvantage.

As you well know, the phorias or tropias are classified as hyper, hypo, exo and eso, the prefex being self-explanatory. Tropias are constant and the phorias are tendencies to squint.

Besides the muscle anomalies, we mention the following: (1) muscle paralysis; (2) convergence paralysis; and (3) divergence paralysis.

And finally if we have proper illumination, a clear dioptric system of the eye, active adaptation, emmotropia, a good reserve power of accommodation, a good convergence and divergence power of the eyes, we may yet be subject to a hemeralopia (day blindness) which is so often associated with retrobulbar neuritis, or nyctalopia (night blindness) that may be hereditary or due to a vitamine "A" deficiency and is accredited as a symptom of many other conditions.

PERIPHERAL AND CENTRAL FIELDS

The fields may be contracted so that one sees but a very small area about the point of fixation, such as in the late stages of glaucoma. It is also true that a sector of the field can be lost through brain tumors or injuries.

Hemianopsia is not an uncommon finding. One half of the field is lost as in pituitary tumors.

The peripheral field may be normal in dimension and the patient suffer from scotoma. We classify them as central, peri-central, para-central, circular, etc., depending on their shape and location in the visual field.

Binocular vision itself is divided into three large groups (which some authorities further subdivide):

1. Simultaneous binocular macular perception. If a squint exists, the patient sees double.

2. Fusion and fusion amplitude. The two dissimilar images are superimposed and fused into one uniform whole by physiological suppression.

3. Stereopsis. Many patients have normal findings in regard to the aforementioned details, but do not have 100 per cent stereopsis as based upon the findings of the Keystone stereo-metric series. We should observe that stereopsis, which depends mainly on lights and shadows, perspective displacement and parallactic displacement, is essential to determine the relationship in space of one object to another.

In conclusion, I submit this study of the efficiency of the eyes that it may prove of practical assistance and stimulate the oculist and general practitioner to provide for more detailed study of the patient's condition.

514 Sherland Building.

A NEW "HIGH" IN MEMBERSHIP IN THE ASSOCIATION HAS BEEN REACHED — 2,960. THE LIST WILL BE PUBLISHED IN THE DECEMBER ISSUE

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NOVEMBER, 1937

EDITORIALS

THE FRENCH LICK SESSION

Notwithstanding the conflict with the elements—a heavy rain through Sunday, Monday, and Tuesday—an attendance of 1,154 was registered for the eighty-eighth annual convention of the Indiana State Medical Association at French Lick, October 4th, 5th, and 6th. There were 684 physician members, 351 women guests, 66 men guests (out-of-state physicians), and 52 exhibitors.

Dame Nature, though she frowned upon us with almost daily showers, had made abundant provision for our coming, for she had made a veritable bower of beauty of the foothills of the Cumberlands. With a sheen of gold and of silver, with all the beautiful colorings which the fall season brings to what had been a verdant splendor, she painted a picture which was the envy of every artist, and formed a setting for our annual gathering unequalled in our long history. The guests of the occasion were not slow to recognize this. It was common talk that instead of hurrying to French Lick, each driver tarried along the highways, each of the many curves in the roads lending additional beauty to what had seemed to be the zenith of possibilities in splendor.

Throughout the year, THE JOURNAL spoke of what was in store for us, and those stories were based upon an intimate acquaintance with the region at all seasons, but never before have we seen it so beautiful. The glory of the hills (to many who had never before seen them, they appeared to be young mountains) was but an auspicious prelude to what was to follow during the convention days. The attendance record reached 1,154, a mark never before equalled in a meeting held outside of our capital city, and most of the registrants remained for the full term of the convention and were loathe to leave when President Clark declared a final adjournment.

To the local physicians, including all from any point south of Indianapolis, goes the heartfelt thanks of everyone who attended this, one of the most successful conventions of our Association. Nothing was left undone to assure the personal comfort and entertainment of every guest. The down-state folk simply closed shop for the duration of the convention and resolved themselves into a committee of one with the sole objective of entertaining the unexpected host that had dropped into their midst. It would be impossible to single out any person or any group to whom especial praise is due, for the perfect coordination of every physician in the entire territory was constantly evident.

At least a hundred guests were heard to remark that the place-of-meeting question was permanently solved, that *every* meeting should be held at French Lick, a sentiment that we heartily endorse.

The hotel staff, Tom Taggart, the manager, the room clerks, the bell boys, the elevator attendants, the dining-room crew—we talked with everyone save the head of the dairy department—and all of them had fulsome praise for Indiana Medicine as represented by those in attendance.

Now to the meeting. First, the commercial exhibits were unusually worth while, and the exhibitors expressed themselves as overwhelmed with the record attendance and the spirit manifested throughout the session. The scientific exhibit was one of the best we have seen at any of our conventions.

As is customary, Monday was given to the entertainment features, golf occupying the center of the stage. The display of prizes in the hotel lobby resembled nothing so much as a well-equipped shop, and that may have had something to do with the unusually large number of addicts which competed for them. Dr. Boyd Burkhardt, of Tipton, carried off high honors, while that consistent winner, Dr. Robert Acre, of Evansville, made a close second. In another part of the Taggart estate, a large group competed at skeet and trap shooting, a new feature of our annual meetings and one that rapidly is claiming more and more attention. (List of winners on page 586.)

The annual stag party came in for more than its customary attendance, for almost every man registered made his way into the large room where a dinner fit for kings was served, sans silverware, napkins, and other paraphernalia so long deemed necessary for dining in comfort, but the men went to it in mighty fashion. Various cocktails plus a plentiful supply of the amber fluid supplied additional zest to the evening.

While all of this was going on, the women folk were being entertained in the main dining room,

where Bertita Harding told them of the beauties and charms of life in Mexico, and this was only a forerunner of the pleasurable functions in store for them throughout the session.

On Monday noon the Council met in luncheon session, transacting such business as had accumulated since the mid-winter meeting. The present editor of The Journal, Dr. E. M. Shanklin, was elected to serve for another year, and Dr. Pierce MacKenzie was reappointed to the Editorial Board for another term of five years.

The House of Delegates convened on two occasions, each session being expedited as much as possible in order to care for the large grist of official business necessarily coming before it. On Wednesday morning, the House met at seven o'clock, in breakfast session, to care for the annual election and to act on reports of reference committees.

A spirited but friendly contest between two candidates for the office of president-elect resulted in the choice of Dr. E. M. Van Buskirk, of Fort Wayne, over Dr. E. E. Holland, of Richmond. Dr. A. F. Weyerbacher was unanimously chosen to succeed himself as treasurer.

Dr. R. L. Sensenich, having recently been made a trustee of the American Medical Asosciation, presented his resignation as a delegate to that body whereupon the chair announced that his alternate, Dr. E. M. Shanklin, became the delegate. Dr. George Dillinger was elected to fill the place of alternate. Drs. Don F. Cameron and F. S. Crockett were re-elected as delegates, with Drs. Norman Beatty and A. M. Mitchell as alternates.

Indianapolis was chosen as the scene of the 1938 convention.

Section officers were elected as follows:

Section on Medicine: Chairman, George Dillinger, French Lick; vice-chairman, B. G. Keeney, Shelbyville; secretary, Walter Portteus, Franklin.

Section on Surgery: Chairman, Paul Beard, Indianapolis; vice-chairman, Frank Ramsey, Indianapolis; secretary, William C. Wright, Fort Wayne.

Section on Ophthalmology and Otolaryngology: Chairman, D. A. Bartley, Indianapolis; vice-chairman, Carroll O'Rourke, Fort Wayne; secretary, Eugene L. Bulson, Fort Wayne.

Section on Anesthesia: Chairman, George Rosenheimer, South Bend; vice-chairman, Roy Geider, Indianapolis; secretary, Lillian Mueller, Indianapolis.

The convention hall was filled when the gavel fell, announcing the opening of the scientific program. Dr. E. D. Clark presented the annual president's address which appears in this issue of The Journal. In order came the papers by Sumner L. Koch, Frank J. Heck, J. O. Arnold and A. C. Furstenberg, each address being given the closest attention by the large and appreciative audience.

The various sections met on Tuesday afternoon, and on Wednesday morning a second general session was held with Joseph Brennemann, L. A. Buie, Karl Menninger, B. H. Nichols, J. S. Lundy and Frank H. Lahey as speakers.

The election of officers of the Woman's Auxiliary resulted as follows: Incoming president, Mrs. F. B. Wishard, Anderson; president-elect, Mrs. Maurice B. Van Cleve, Terre Haute; 1st vice-president, Mrs. C. E. Cottingham, Indianapolis; 2nd vice-president, Mrs. Joel Whitaker, Indianapolis; 3rd vice-president, Mrs. James Baxter, Jr., New Albany; 4th vice-president, Mrs. H. C. Knapp, Huntingburg; recording secretary, Mrs. John F. Habermel, New Albany; corresponding secretary, Mrs. C. V. Rozelle, Anderson; treasurer, Mrs. C. L. Bock, Muncie.

Thus closed a convention which is admittedly one of the outstanding events in our history. As we have said, all were loathe to leave, fearing that some event had been overlooked and there was more to come. As our car headed northward, we turned to take one last glimpse of the scene, trusting that we might soon be planning to attend another convention at French Lick.

"THE BIRTH OF A BABY" — IN PUBLIC!

Unless you had seen it yourself, you would never believe that an actual birth of a baby could be shown on the screen to a lay audience without being offensive. Yet it is a fact that in the full-length moving picture entitled "The Birth of a Baby," this very thing really happens and is handled with such good taste that it is the most natural thing in the world. In order that the medical profession of Indiana might approve its showing to the lay public, a special preview of the picture was shown during the annual session at French Lick for the physicians, their wives, and guests.

The doctor in the picture not only is cast in the role of a physician but is shown to be what every good physician should be—a teacher. Step by step the process of birth is covered in a simple, understandable story. Diagrams and sketches showing the development of the child before birth are interwoven into the picture story in a way that make a dry lecture partake of entertainment. "The Birth of a Baby" may become a pioneer achievement in screen history. It may start a cycle of educational motion pictures on various medical subjects that may result in improved public health, better medical attention, and a wider appreciation by the laity of the importance of proper medical attendance.

Obviously the picture is not complete in all details, but it is medically and technically accurate. The aim of the film is not to give the public a

medical education, but to entertain and instruct. Its production was supervised by a committee of five outstanding obstetricians, and they have every reason to be proud of their work.

The picture creates an enthusiasm as to the future use of films for public education in medical matters. How better can cults be exposed than on the screen? How better to put across the story of the distress caused by syphilis? How better to "sell" the benefits of annual physical examinations? How better to carry on, as did the "March of Time" film only a few months ago, the campaign against cancer? It is hoped that the American Medical Association and component state societies will cooperate with such earnestly conducted enterprises as the educational film "The Birth of a Baby."

We are grateful to the American Committee on Maternal Welfare and to Mead Johnson and Company through whose cooperative efforts this film has been produced. We hope that it may be seen by every individual in the country, for only in this way can it accomplish the maximum of good.

PRO-RATING OF DUES

A resolution was introduced at the first session of the House of Delegates seeking an arrangement whereby new members coming into component societies after the middle of the year might have their Association dues pro-rated. The reference committee report was distinctly against such a measure and the motion was tabled at the second session, thus cutting off debate on the question. The resolution came from the Fort Wayne Medical Society, and its sponsor spoke to us about it. It is meant to apply particularly to the young man fresh from internship and just starting to practice. At such a time, the question of finances is a very important one, of course, and it is important that the young man get started right, which means identification with his county society at the earliest possible moment.

The premise is very sound, for these are the young men who in future years will control the destinies of the Indiana State Medical Association, and the sooner they get on the job, the better this control will be. However, there are many phases to the question. Among these is the matter of keeping records, and while this is not such a great task, it should be remembered that the county society secretary already has many details to bother him; but this is a minor point. A more important point is that most county societies require a residency of six months to one year in the county before an application for membership is made, and in most of our larger societies there is a summer vacation period (usually the months of June, July, and August) during which applications are not considered, and this is mentioned because it is during this period that applications are received from hospital interns whose terms usually end in July. Thus their applications are not presented until the September meeting of the society, and probably are not voted upon until October. It is the custom of one society to place these newly elected men upon the local membership roll immediately after their election, but they are not required to send in their State Association dues until the first of the next year, and this procedure is carefully explained to the new member.

The Fort Wayne Medical Society has a rule that applicants must have been practicing for one year before making application for membership, and that seems to be a logical answer to the problem. We dare say that a check-up would reveal that the newly located physician, during the first year of practice, has become a member of a golf club, one or more luncheon clubs, and perhaps a bridge club or two, any one of which demands much more in the way of yearly dues than does his medical society.

We strongly favor getting acquainted with the younger men and getting them into our county societies. Long have we preached this very thing, as THE JOURNAL files will show, and we repeat that these youngsters are the ones who will displace the oldsters in Association control, and it is indeed important that they identify themselves with the local county society immediately upon entering practice. Two things will bring this about: (1) the teaching of the value of medical organization during the junior and senior medical school years, a thing that recently is being done in our own medical school, and (2) most important, these young men should be approached immediately upon locating in a community and given a "sales talk" if such be needed. This is distinctly the problem and the duty of the local society, and the duty does not end with getting these young men into the society; they must be made to feel at home. The newcomer should be called upon to discuss papers read before the society and, while he is a beginner and his experience is necessarily limited, he should be invited to participate in programs.

We believe in the young men. We know their importance to the future of Indiana medicine, and we must do all within our power to further their interests. The pro-rating of Association dues will not make any material difference in their connection with organized medicine.

OUR LABORATORY FACILITIES

Dr. F. R. Nicholas Carter, chairman of the Association's Committee on Venereal Disease Control, made a report to the House of Delegates at the French Lick convention in which he gave the results of a state-wide survey of laboratory facilities for serological and dark field tests for

syphilis. This report elicited quite a bit of discussion before the reference committee and again when the matter came up before the final session of the House. In this report, it is made clear that no matter how well organized we may be in the campaign against these loathesome and yet controllable diseases, we must recognize the fact that a certain amount of laboratory work is very essential; we must make easily available the laboratory tests. Of the ninety-two counties in Indiana, but twenty have complete laboratory facilities of the sort required, which means that only two score of our counties have available the facilities for Wassermanns, Kahns and Klines, together with the dark field equipment, to say nothing of other tests, such as the Hinton, Ide, Koehne and Kolmer. Another illuminating feature of this report is the fact that laboratory fees for such serological examinations vary from one to ten dollars, which seems a considerable spread. This matter was generously discussed by the House and it seemed that steps might be taken to adjust the scale. The availability of laboratory tests is of such importance that steps must be taken to remedy the present situation and it now seems that the various laboratories already established, in connection with the state laboratories, will provide adequate facilities for such work. One point raised was that specimens sent through the mails might not be in proper condition when received, but Director Culbertson reported that only very seldom did the state laboratories receive a specimen which they were unable to use. It is recommended that the county medical societies take up this matter, particularly in those localities in which there are no laboratory facilities available, and take such measures as will insure prompt service at some outside-the-county laboratory. As we have repeatedly said, the Indiana State Medical Association is in this campaign to stay; our committee has entered into it with a forcefulness that means success. Many of our larger county societies are conducting a local campaign with much success. We cannot afford, then, to permit a little matter of laboratory facilities to embarrass us. Further, we have every confidence that our committee will be able to work out a plan whereby these facilities will be readily and economically available to every physician within our state.

EDITORIAL NOTES

Hoosier motorists planning a trip into or through Wisconsin are advised of a new law having to do with the prevention of forest fires in that state. Under this recently enacted law, the throwing of cigarettes, cigars and lighted matches from motor cars is a punishable offense. Further, smoking in automobiles is strictly prohibited except when ash trays are provided therein. We are advised that a strict enforcement of this new law is being carried out.

It seems that in 1938 we will have less conflicting dates for our district meetings, due to the activity of the members of our Council. Association officers are asked to attend these meetings, and in times past there have been as many as three such gatherings set for the same day. In passing, we may observe that these district meetings once more are coming into their own since attendance thereon, during the past two years, is decidedly increasing.

In line with the suggestion of Surgeon General Parran, some of our medical schools have arranged special courses in venereal disease control. Among these is Western Reserve University, of Cleveland, and their announcement carries the information that they have prepared such a course of three months or longer, open to physicians of the Middlewest. In addition to the regular registrants for these courses, arrangements have been made to accommodate a few short-time registrants. There is no fee connected with this course and those interested are asked to communicate with Dr. O. O. Applewhite, Room 314, U. S. Court House, Chicago.

This "going fishing" business seems on the up, according to figures recently released by the United States Department of Commerce, there having been spent for fishing licenses in this country during the past fishing season the tidy sum of $8,002,-887.31, an increase over the previous year of a cool million dollars. The number of licensed fishermen in the present year is given as almost six million, an increase over 1936 of a half million. Also comes the cheering information that the increased cost of licenses, this year, amounted to one cent per fisherman! Verily, Izaak Walton is coming into his own!

The annual conference of secretaries and editors will be held at the American Medical Association headquarters, November 19-20. This conference, attracting an average attendance of some 200, has come to be a meeting of much importance. A. M. A. officials close their desks on these occasions and attend the sessions in a body.

General Chairman Dillinger and his local committees, the officers of the Orange County Medical Society and of the Third Councilor District, are to be congratulated upon the success of the recent French Lick session. We heard not one single complaint during our four days there, while complimentary remarks were to be heard on every side. Southern Indiana, long known for her hospitality, fairly outdid herself on this occasion and put on a program of entertainment and instruction rarely equalled in the long history of Association conventions. We heard dozens of guests ask, "Why cannot we have all our meetings down here; the folk seem to like to have us with them and we like to come!" In all of which sentiment we join, most heartily.

We long have had reason to suspect that the reports of officers and committees, as presented in the pre-convention number of THE JOURNAL, are not as widely read as they might be, but until the second meeting of the House we had no definite information on the point. Dr. Ira Perry, chairman of a reference committee, in making his report asked the question, "How many of the Delegates present (100) have read the report of the Executive Committee?" (The report covers some twenty pages in the convention handbook, and deals with practically every activity of the Association for the previous year, and contains a veritable mine of useful information.) *Less than ten per cent of those present had read the report!* On at least three occasions during the past few months, THE JOURNAL has directed attention to these annual reports, asking every member to read them. Not once did we dream that *any* delegate would fail to make a very careful study of the more important reports before setting out for the convention. We wonder how *any* delegate can intelligently act upon these reports without any notion of what they contain?

THE JOURNAL has refrained from editorial comment upon the changes in the personnel of the Indiana State Board of Medical Registration and Examination, hoping that we might learn of some of the factors that brought about changes without any notice that changes were contemplated. Occasional rumors were heard concerning criticisms of individual members of the Board, and those criticisms apparently were prompted by personal matters, but there was no intimation that the Governor had in mind such a program as was announced, unheralded. A bit of history in this connection may be order. Prior to 1920 there was considerable dissatisfaction in Association circles with one or two appointees; our Committee on Public Policy and Legislation, then headed by the "Grand Old Man of Indiana Medicine," William Niles Wishard, Sr., had been endeavoring for many years to interest the Governor in permitting the Association to have something to say about these appointments, but until 1920 these importunities were without avail. At that time, Governor Goodrich advised Dr. Wishard that he would be glad to have the recommendations of the Association and the names of Drs. W. R. Davidson, of Evansville, and E. M. Shanklin, of Hammond, were agreed upon by the House of Delegates at the South Bend meeting. The appointments were duly made the following year. Some six years later, Dr. William T. Gott, long-time secretary of the Board, resigned and Dr. Shanklin was named to that office. When Dr. Shanklin resigned as secretary after three years (later resigning as a Board member), Dr. Davidson became secretary and executive officer of the Board. Dr. Franklin S. Crockett, of Lafayette, was named to succeed Dr. Shanklin on the Board. Dr. Davidson brought to the office of secretary a broad experience as a member of the Board, plus an unusual knowledge of the legal aspects of questions which continually came before that body. Like Dr. William A. Spurgeon, for years the Board's president, Dr. Davidson possessed a legal mind and during his tenure as secretary he made an enviable record. "Davy" Crockett, known to every member of the Association, had a wealth of experience in Association affairs, knew all the answers and knew his way around. Therefore, it was felt that Board affairs in Indiana were well cared for until these men had reached the age of retirement. Hence, the announcement that they were to be replaced came as a distinct shock. No one without experience on the Board of Medical Registration and Examination has any idea of what such a membership entails. It is the most expensive medical job in Indiana, this applying especially to the secretary of the Board. It is veritably a "labor of love" since no man could hold that position unless the interests of his profession came first in his mind. The reasons for drastically changing a purely educational board without consulting those who know most about it are unfathomable. The Medical Board is an educational board; it definitely is *not* a political board, though prior to 1920 we had every reason to term it such. There can be no criticism of the men who have been named as successors to Drs. Davidson and Crockett, for the Association would have approved the appointments inasmuch as the men are thoroughly reputable physicians who stand high in their communities; but we are concerned with the fact that the successors were named without consultation with the Indiana State Medical Association. We regret the change and trust that future events will bring about a more intimate relation between the office of the Governor of Indiana and the Indiana State Medical Association in matters pertaining to appointments of physicians to the Indiana State Board of Medical Registration and Examination.

CONVENTION NOTES

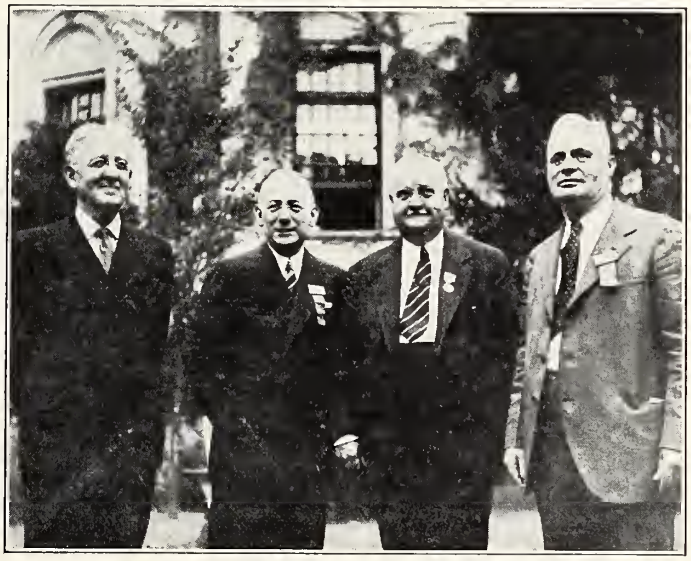
THAT "Grand Old Man of Indiana Medicine," Dr. William Niles Wishard, was on the job early on Monday morning to meet his many friends. For the first time in our memory, he was unable to attend the opening session of the House of Delegates, but he was present for the second session and was actively interested in all of the convention's proceedings.

THE SCIENTIFIC program got under way on time Tuesday morning and clicked along without a hitch until Wednesday noon. A large and highly attentive audience was had in both the general and section meetings.

AL WYNKOOP managed to get a lot of home-spun Hoosier philosophy into his humorous talk at the annual banquet. This Lebanon editor takes a broad view of the thing we call "life" and proved to be one of the most entertaining speakers we have heard in many a moon.

The consideration of a contract for the printing of THE JOURNAL for the next year has been referred to the Executive Committee. We have been fortunate in having good printers these past few years, and it is to be hoped that the committee will again be successful in their choice of a printer. What with increased labor costs and considerable upping in the cost of paper, our 1938 printing bill will be considerably greater than it has been in the past.

QUIET, reserved Herman Baker, 1938 president, approached his first formal address to the House of Delegates in fear and trembling, so he said. He declared that he could neither write nor talk. From the spontaneous applause at the conclusion of his brief address, we opine that Herman grossly under-rates himself.



SOME OF THE "BIG SHOTS" AT FRENCH LICK

M. A. Austin, Anderson, Chairman of the Council; Dr. Herman Baker, Evansville, president for 1938; Dr. E. D. Clark, Indianapolis, president for 1937, and Dr. E. M. VanBuskirk, Fort Wayne, president-elect for 1939.

TOM OBERLIN pirouetted about the dance floor somewhat like a gay, young gazelle, just turned loose in a lush, green pasture. We overheard an elderly lady exclaim, "La, me! How that old man does get around!"

FERD WEYERBACHER gets a great kick out of presenting the treasurer's report these days. Ferd hates red ink, says it just gums up things, so when he makes a black ink report, his face beams.

MEMBERS may not be aware of the savings effected in our convention expenses by the stenographic work done by our headquarters staff. They report the proceedings of the House and the Council, in addition to taking care of some of the section meetings.

WE THANK the many members who said nice things about THE JOURNAL. Such little comments please the entire staff of eight and do much to pep us up for the next year.

MEDICAL politics was of the quiet order this year, the convention and hotel lobby affording little information as to plans for the annual election. We recall the old days when campaign managers were in order and an election was a real contest between two or more camps.

RATHER warm temperatures prevailed during the convention, especially during mid-day. This, with some rain each day, put a ban on much hiking about the hotel gardens and spacious grounds.

GEORGE DANIELS was about number one in registration at the convention, and the last man to leave. George does like his annual conventions, and he misses nothing.

DR. JOHN HEWITT, of legislative fame some ten years ago, came down from Mudlavia and thoroughly enjoyed living over the hectic days of the 1927 Indiana legislature.

JAKE OLIPHANT, the "perfect delegate" from Sullivan County, dropped into the stag party, ensconced himself atop a beer keg, and remained throughout the ceremonies.

"MY WILD IRISH ROSE" was the theme song adopted by a choral group following the stag dinner. The leader could not be identified, for it seemed that almost everybody in the group was trying to lead.

RAGSDALE, militant councilor from Bedford, pulled a Jekyll and Hyde on his friends that was good. "Rags" has a new hat of the trick variety. Donning this, his appearance is changed to such an extent that his close friends hardly recognize him.

ALEXANDER, of Terre Haute, was disconsolate the first two days of the session. His convention buddy, Mitchell, was delayed in New York and was wending his way French Lickward by plane. Alex vowed that until Mitch appeared he would not don the tie, hanky and hose ensemble that attracted so much attention at the South Bend session.

THE STAG smoker was a great success, though the room was hot and poorly ventilated. Knives, forks, and spoons were omitted, and prehensile organs were in use during the evening.

IT PROBABLY is just as well that Pierce MacKenzie is in Scotland these days, since Bob Acre has lost his long-maintained golf championship. Pierce, you may remember, had much to say about this golf business in the September JOURNAL when he predicted that Acre would continue to lead the golf procession for some time to come. Bob fell from his throne after putting up a valiant fight, losing by one point to Boyd Burkhardt, the new champion.

DON CAMERON went over to Scotland a few months ago to check up on his ancestry. He got all mixed up when he ran into the Red Camerons and the Black Camerons. He had thought he was a Red, but learned he was of darker hue.

IRA PERRY, long time councilor from North Manchester, has adopted a happy frame of mind in reference to medical economics, the cultists and all those things that occasionally distract us. Says Perry, "Let 'em alone and they'll hang themselves!" Pretty good philosophy, that.

H. C. WADSWORTH, councilor from the Second District, escorted Dr. McPherson, of Washington, D. C., delegate from Daviess County and mayor of his home town, to the convention.

NICK CARTER showed up a large group of county medical societies when he displayed graph charts showing the lack of response to a questionnaire he sent to them relative to laboratory facilities in Indiana. As chairman of the state committee on syphilis control, Nick is doing an excellent bit of work and deserves much more support than he has received.

IN OUR notes of two years ago, we commented on the head gear of "Bunny" Hare, of Evansville. He failed to attend the South Bend session, but showed up at French Lick without a hat of any kind. We understand he was quite put out by our little story two years ago, for which we are extremely sorry.

A SNAPPY, tuneful orchestra appeared in the lobby, Monday night; a space was cleared and in no time was occupied by the terpsichorean devotees. A dancing group always intrigues us, though we must confess we get a good abdominal laugh out of the antics of some of the old cocks who essay the modernistic steps.

NOTWITHSTANDING the location of our room, well up and 'way back in the woods, a choice made in order that our editorial duties might not be unduly disturbed, we had quite a bit of static beginning the very first night. Wafting up from a lower floor came the sounds of what presumably was intended for singing. As nearly as we could analyze the sound, the chorus consisted of two poor leads, one featuring basso and two very sick tenors. Their final offering was a murderous rendition of *Auld Lang Syne*, this at about 2:30 a. m.

JUST before the opening of the first session of the House of Delegates, Ed Clark remarked to us that he probably would mess things up, as he was definitely not a parliamentarian. However, his fears were groundless; he went through the session, handling the machinery of the House like a veteran, aided and abetted by Secretary Tom.

The only noticeable error occurred when Tom handed him an order of business that already had gone through the mill!

HERMAN MORGAN was beating about the bush out back of the hotel early one morning, and in response to an inquiry as to what he was doing, he said that he was looking for his congressional candidate. We recall that at South Bend, a year ago, Herman dug up a prospective congressman and all but had him signed up when the prospect asked for a year to think it over, pledging his appearance at the French Lick session. Up to the moment President Clark banged down the gavel on a sine die adjournment, the candidate had not been found and Herman was disconsolate.

SHORT, under-slung Frank Mervis came down from Indiana Harbor to show how dancing should be done. He sweated through every number on Monday night.

HUGH KUHN, of Hammond, spent one morning at his favorite pastime astride a horse. His mount, however, insisted upon keeping his head down, causing Hugh to fear that he might do a Prince of Wales ere the morning was over. He later reported a safe return.

AMONG the county societies to send down unusually large numbers of members were Allen, Lake, and Marion counties. We do not recall when so many were present from the first two named, and Marion County also had a large quota.

MISS ESTHER KRIEGER, secretary to president-elect Baker, came up from Evansville to assist at the registration desk. This was her first visit to an Association convention. She says she likes 'em.

PRE-CONVENTION arrivals found all arrangements perfected for the session, the hotel management and staff ready to serve, and the menus bulging with extra good things to eat. From our observations in the dining room, on the first day we opined that the little slogan so prominently displayed on souvenir postal cards, "When Nature Won't, Pluto Will," might well have been adopted as the convention theme!

VERNE HARVEY, "big shot" of the State Board of Health, was hopping about all Sunday afternoon. We finally corralled him for an interview but all we could get out of him was a jumble of "AC" and "DC" which we later learned referred to the electric current. It seems that he was having some trouble with the lighting of one of his exhibits.

TOM HENDRICKS, sans the "gangster green" convention sweater, was as usual about the busiest man on the job. In fact, he was so busy that he passed up the Sunday night supper. His waiter, however, dispelled all false conceptions about this when he told us of Tom's carryings-on at the dinner table. He said that the blonde senator was at the table for a full two hours, and worked his way down an elaborate menu with machine-like precision.

THE Shelbyville Kennedys, Sam and his charming little wife, were sunrise arrivals on Sunday morning, remaining until they were assured that the party was all over. Convention fans, no end, these folk do enjoy the annual gathering of Hoosier medicine.

A COUPLE of skeet addicts, probably trying to get an edge on their fellow contestants, arose at an early hour and a little after six we heard them popping away at targets, back in the hills. We didn't go out to identify them, hence cannot say as to whether their early morning practice availed them anything.

LIGHT sleepers and early risers heard the feathered chorus each morning, the Kentucky cardinals seeming to be the leaders. That saucy bird with the raucous, discordant note, the blue-jay, also had somewhat to say. We liked both of them.

W. H. STEMM, past president of the State Association, for whom a party was recently given in recognition of the completion of his fiftieth year in practice, was among the early risers on Monday morning, all set for the golf tournament. He says he finds the increasing years slow him up in his former hobby, that of hunting and trap shooting, hence at this late date he became a disciple of St. Andrew.

EARLY Monday morning always is a busy time at our conventions. The hotel lobby resounds with the click and clamor of the hob-nailed golf shoes and the rattle of golf bags. It seems that most players want to get an early start over their rivals and get it over with. By the way, to what use are the "plus fours" of former days being put now? These modernists seem to have discarded them in favor of slacks, or even plain pants.

A SPECIAL guard was maintained over the two cases displaying the golf and skeet prizes in the hotel lobby, through Sunday night. We made no attempt to count the prizes, but noticed that they ranged from "ancient bottle" to ultra-modish men's wear. It probably is just as well that the first day of the convention is given over to these sporting events, since they attract convention visitors in such great numbers as to preclude any scientific session.

HEAVY rains over the week-end threatened to interfere seriously with the attendance, but the weather man finally won, and perfect fall weather prevailed. We are wondering about the "wrath of the gods." French Lick has taken over the name of the arch-devil, together with that of his help-meet, Proserpine. Probably old Jupiter Pluv., angry over all this publicity, wanted to make himself prominent.

THE GENERAL atmosphere of the convention was good; it seems that everybody reflected the spirit, "I came here to have a good time and to participate in a high class program." We opine that each attending member carried out that program to its fullest extent.

AND, BOY! How the women folk did gang up on us. They came in great numbers and entered into the spirit of the occasion like a bunch of college girls.

THE REGISTRATION desk, as always, was most efficiently handled, with our own headquarters staff directing. We never have learned just who chooses these young ladies, but we hereby nominate him or her as chairman of awards at any art show.

J. BILL WRIGHT, *arbiter elegantiarium* in matters of men's dress, lived up to this reputation, changing costumes four to five times daily. We were asked as to where one might find Bill, one morning, and described his appearance with the admonition that he wore a light suit at breakfast, at ten he would be in brown, at one he would don a gray suit, and at four a double-breasted blue. We hope our inquirer found him.

WILL KENNEDY, for years a regular attendant upon our annual conventions, and active in the councils of the Association, was forced to absent himself from the French Lick meeting due to illness. His many friends were inquiring about him, all wishing him a speedy return to health.

HOMER WHEELER, veteran convention-goer, dropped in to see the folk and to renew old acquaintances from down Perry County way. Says he enjoys a return to "private life" after a long and arduous service on the Executive Committee.

DR. W. T. LAWSON, of Danville, eighty-eight year old secretary of the Hendricks County Medical Society, arrived in plenty of time to attend the stag party, and to enjoy the whole convention. Slim and straight as a boy, Dr. Lawson's years rest lightly upon him.

SUNDAY evening before the convention was one big time for a few of the folks who had birthdays to celebrate. And passing cake around the main dining room of the French Lick Springs Hotel resulted in an effusion of poetry from Dr. N. K. Forster, something like this:

At guessing games, I am no good;
The market stumps me, too.
I'd give a dime most any time
To win a bet or two.
But I can tell you one thing now
Before I hit the sod—
That Dr. Shanklin surely is
About as old as God!

WE HAD only one complaint to register during the convention, and that has to do with the culinary department of the hotel. They persisted in serving white pepper, very much to our dislike, for being a pepper addict, we prefer the black variety.

THE WOMEN FOLK attending the convention (and their number increases each year) seem to have had a very delightful time of it. Several have volunteered the information that though they had been attending these meetings for many years, the French Lick convention was tops. With all of which we agree.

ONE THING in favor of holding conventions at French Lick is that there are few diverting influences to take one's attention from the programs. When in Indianapolis, for instance, there is forever something that one wants to do—shopping, go here or there to call on a friend, or just mill about town. At French Lick everything is under one roof, and most folk seem to find time to do their visiting after the scientific sessions have closed for the day.

QUARTERED 'WAY BACK in the woods, we seem to have missed much of the "night life" of the convention. Post-convention stories of this and that party, of visits to "Brown's" and the other casinos have come wafting in to the editorial desk along

with the usual tall tales of parties in various sections of the hotel. One group tells of walking down from the seventh floor of the hotel, rapping on the doors of guests on the various floors, the responses varying from a hearty welcome to vituperative commands to "get thee hence!" Such is convention life!

HENRY LANGSENKAMP and DON JAMESON, of Indianapolis, deserve credit for the air views of the flood which were exhibited in the display at French Lick.

DR. VERNE K. HARVEY, director of the Indiana State Board of Health, deserves our thanks for his courtesy in supplying movies and lanterns for use at the annual session. The lanterns were operated by Mr. Smallwood, Mr. Rayl, and Mr. Boston.

WHEN MORE than 700 attended the banquet meeting at South Bend in 1936, we thought that an all-time high had been reached, but with an attendance of more than 900 at the annual banquet at French Lick—and only one larger group ever has been served in the French Lick Springs Hotel dining room—a new record has been set. It was a great party, and while the majority of those attending were in formal dress, the spirit that permeated the gathering was sufficiently friendly and informal that mass singing was indulged in a few times during the evening under the inspiration of an exceptionally good orchestra that played some of the well-known and old-time melodies.

JAMES T. BROWNLIE, of London, father-in-law of Dr. Russell W. Lavengood, of Marion, registered the first day of the meeting and remained throughout the session. And he said that if he entered the pearly gates of Heaven and was asked what he had done and what he had seen on this earth, he would reply that he had attended the stag party of the Indiana State Medical Association at French Lick in 1937!

THE SECRETARIAL GROUP of the American Academy of Ophthalmology and Otolaryngology, headed by Dr. William P. Wherry, of Omaha, Nebraska, were holding a meeting at the French Lick Springs Hotel at the time of our convention. The group was invited to attend the meetings and to take part in any of the activities of our convention in which they were interested.

THE FOOTBALL MENU cards for the stag banquet at French Lick were novel and interesting.

Pierce MacKenzie was elected to a second five-year term as a member of the Editorial Board of THE JOURNAL, a merited recognition, as he has done some very excellent writing for our magazine.

The naming of Dr. E. M. Van Buskirk, of Fort Wayne, as president-elect is a merited tribute to one of the "old war horses" of the Indiana State Medical Association. We have had the pleasure of knowing "Van" over a long period of years and have been associated with him in the Council and, on occasion, have connived with him in political measures, in all of which associations we have found him four-square in all things. When the time comes for Van to take the helm, we will find in him a very capable leader and one who is willing to lend his every effort to the furtherance of Association affairs.

DURING THE session at French Lick, Parlor E for the use of the Section on Anesthesia was a popular place on Tuesday afternoon, despite the uncomfortable heat. At one time, eighteen members who were not able to find seats were counted standing in a group near the entrance. They were listening avidly.

THE SEVERAL sections were delighted to have friendly visits during their respective sessions from the president and the president-elect. This gracious gesture of interest and cordiality easily could be made a precedent and custom of lasting goodwill from which the Association as a whole as well as the individual membership all could benefit.

IN THE IMMEDIATE future, due thought should be given to the proper air-conditioning of at least the smaller assembly rooms. Some of these were almost unbearably hot and stuffy. It cannot be expected that members will be over-anxious to attend, nor can they gather the most of value when they know they will be uncomfortable. Rather, the indications point toward an increasing desertion in the direction of the bar and cocktail lounge. It appears that, on business principles, one is made comfortable and happy (sic) there. At our sessions, let's be comfortable, at least. (Of course, it may be necessary to air-condition the whole French Lick Valley, but then . . !)

IT IS FELT in some quarters that our smarter minds should study ways and means for the expediting and still maintaining the top-notch efficiency, as in times past, of the labors of the House

of Delegates. The amount of work brought there is becoming increasingly burdensome, and every effort should be made not to have the sessions too long and too tiresome. The change in the by-laws permitting the president to select the reference committees far enough in advance so that publication may be made in THE JOURNAL and the Hand Book is a proper and useful step toward this end. Another suggestion picked up from our genial Tom is that every resolution of importance and every motion of more than perfunctory need should be prepared and handed in at the time in triplicate, preferably well typed. This provides one copy for the headquarters records, one copy for the press, and one copy for the reference committee.

QUOTING, in part, directly from a letter from Dr. John S. Lundy, of Rochester, Minnesota, after his return to his home: "I was happy to meet the fellows and was greatly surprised and gratified at the fine attendance at the Section on Anesthesia meeting of the State Association, and for the kind reception I received from all quarters." In Indiana we practice as we still believe—"the proof of the pudding is in the eating." Thoughtful courtesy, gracious hospitality, and wholesome friendliness pay dividends of immeasurable goodwill.

THE GOLF TOURNAMENT

The golf tournament of the Indiana State Medical Association at French Lick attracted more than 100 entries.

Dr. Boyd A. Burkhardt, of Tipton, finished as the champion with an 80 for the 18 holes, defeating the 1936 champion, Dr. Robert R. Acre, of Evansville, by one stroke. Drs. C. J. Adams, of Kokomo, R. W. Wood, of Oakland City, and C. M. Sennett, of South Bend, tied for third low gross with 83.

The blind bogey handicap was won by Dr. C. H. McCaskey, of Indianapolis, with Dr. J. S. Robison, of Winchester, as runner-up. Drs. J. S. Leffel, of Connersville, L. A. Wilson, of Dublin, and J. R. Doty, of Gary, were tied for third position in the bogey contest.

The golf committee awarded a total of 86 prizes to the contestants. Four of these were handsome silver trophies purchased through funds given for entertainment by the Indiana State Medical Association, and the balance were donated by well known drug and physicians' supply houses from all over the United States and many drug stores in southern Indiana.

THE TRAPSHOOT

The skeet and trapshooters held their tournament during Monday afternoon, October 4. Prior to the scheduled events, the contestants engaged in practice. When the first event of the regular program was called at 2 o'clock, thirteen skeet shooters were waiting to face the traps. In the 16-yard and handicap events, fifteen shooters competed. Altogether twenty-three shooters were present, including two ladies, Mrs. Combs and Mrs. Cullnane. While no "straights" were made, the closeness of scores indicates that the competitors were trying hard to win.

Appropriate prizes were presented to the winners but the outstanding trophy was a beautiful gold plated cup upon which was mounted the figure of a shooter. This trophy was donated by the Lawrence County Medical Society and will become the permanent property of the shooter who wins it three times.

The following are the winners, competitors and their scores:

SKEET

Name	*Targets Broken*	*Handicap*	*Total*	
Cullnane	48	.6	48.6	First
Logan	48	0.	48.	Second
Combs	47	.6	47.6	Third
Craig	45	2.4	47.4	
Lansford	44	1.8	45.8	
Adkins	43	1.8	44.8	
Green	43	1.2	44.2	
Nixon	42	1.8	43.8	
McArdle	38	2.4	40.4	
Newell	31	5.4	36.4	
Beard	30	6.	36.	
Meiner	27	6.6	33.6	
Smallwood	24	7.8	31.8	

SIXTEEN YARD HANDICAP WITH YARDAGE

	Targets Broken	*Yards*	*Targets Broken*	*Total*	
Donahue	45	20	44	89	First
Engleman	43	18	45	88	Second
Schrock	45	20	42	87	Third
Ensminger	44	19	42	86	*Fourth
Cullnane	41	16	45	86	
Banks	42	17	41	83	
Nixon	39	16	42	81	
Newell	46	21	34	80	
H. T. Combs	40	16	40	80	
Logan	45	20	34	79	
Craig	42	17	37	79	
Bretz	35	16	37	72	
Ramsey	33	16	32	65	
N. B. Combs	26	16	35	61	
Smallwood	32	16	19	51	

* Won the toss for fourth.

At the conclusion of the tournament, a meeting of the shooters was held and a permanent organization formed. Dr. L. A. Ensminger, Indianapolis, was elected chairman for the ensuing year. It was proposed and adopted to divide the state into a northern, a central and a southern zone and to encourage competition between teams representing these zones. Details of this plan will be announced later.

HIGH-LIGHT ACTIONS OF HOUSE OF DELEGATES AND COUNCIL AT FRENCH LICK

So numerous and diverse were the actions taken by the House of Delegates and the Council at the eighty-eighth annual session of the Indiana State Medical Association at French Lick that the average JOURNAL reader probably will not have time to go through the detailed minutes of both meetings of the House of Delegates and the two meetings of the Council. Hence a summary of the highlight actions taken by these legislative bodies at French Lick has been prepared. Details concerning these points may be found in the minutes which appear in this JOURNAL.

ACTIONS OF HOUSE OF DELEGATES

Adoption of Recodified Constitution and By-Laws.

The recodified Constitution and By-Laws, originally proposed in 1933, were adopted as printed in the September issue of THE JOURNAL (see pages 502-511). New amendments to these Constitution and By-Laws were proposed by Dr. Floyd T. Romberger which would have provided for the election of two vice-presidents and provided for the appointment and the publication of reference committees in advance of the annual meeting in order to save time after the House of Delegates convenes. The House voted against Dr. Romberger's first proposal, but approved the second proposal.

As a result of the final action on the Constitution and By-Laws, a new Constitution and By-Laws is now in force and as adopted will be printed shortly in booklet form.

Creation of New Committees

The House authorized the creation of the following new committees:

(1) *Committee to Study and Report on Medical Education in Indiana.* This is in line with the recommendations contained in the annual presidential address of Dr. E. D. Clark, president of the Association. This committee is empowered to "make a factual finding" covering the subject and have a complete report ready for the 1938 meeting of the House of Delegates. Dr. Clark has named the following committee: F. S. Crockett, M.D., Lafayette, chairman; William R. Davidson, M.D., Evansville; David Bickel, M.D., South Bend, and Paul S. Johnson, M.D., Richmond.

(2) *Committee on Occupational Diseases.* At the suggestion of Dr. R. L. Sensenich, a member of the Board of Trustees of the American Medical Association, the House of Delegates authorized the creation of a special Committee on Occupational Diseases. This is in line with the action taken by the American Medical Association which is creating a Council on Occupational Diseases. With the passage in Indiana and in other states of laws making occupational diseases compensable, an entirely new legal-medical frontier is opened up and it is to keep in touch with this that the committee is appointed.

(3) *Inter-Allied Professional Association.* Upon the recommendation of Dr. F. S. Crockett, of Lafayette, the House of Delegates gave the Council the right to create a fact-finding committee to make a study of the inter-allied professional conference movement in other states and to report at the mid-winter meeting of the Council. As the idea came originally from Dean C. B. Jordan of the School of Pharmacy of Purdue University, the Council appoints the following committee composed of Lafayette physicians to confer with Dean Jordan in this matter: F. S. Crockett, F. T. Romberger, and G. A. Thomas. It is understood that in other states such associations are made up of members of the pharmaceutical, state medical, state dental, and state nurses' societies.

(4) *Committee to Investigate Anti-Cult Programs in Other States.* This resolution presented by Dr. A. M. Kirkpatrick, of Columbus, states that as there exist in Indiana various cults and irregular practitioners who are carrying on their activities under the guise of medical practice, that the State Medical Association appoint a committee from its members to investigate conditions in this state and to study how other state medical societies meet the problem. This committee is to make progress reports at the regular sessions of the Executive Committee and a full report at the next annual session of the Association. The House aproved this resolution with the understanding that "such investigation is for the use of the Association members and not for general public information except as asked for."

Resolution on Federal Social Security Act

The House approved "as a matter of record" the resolution introduced by Dr. H. C. Ragsdale, of Bedford, councilor of the Third District, which stated that as the Federal Social Security Act had been declared valid, "the Indiana State Medical Association declare itself in favor of the principles of social legislation, especially as concerns the indigent, aged, disabled, and low wage group" and that the State Association "cooperate with the Federal Government in such social services in that we may direct the government as to the proper application of this service, thus leaving control vested in the medical profession and not permitting it to be subjected to political manipulation" and "that the patient at all times have free choice of his physician."

Staffing of Institutions for Mentally Ill

In his presidential address, Dr. Clark spoke of the surveys made by national authorities which revealed that the state institutions for caring for the mentally ill were understaffed. The reference committee reported as follows in regard to this subject: "Careful inquiry reveals, however, that the large number of custodial cases resident in these institutions does not call for the number of additional doctors suggested in the report. However, some addition to the professional staffs of some institutions is needed and that need should be supported by the profession." This recommendation was adopted by the House.

Change in Wassermann Cards

The House went on record favoring the change in the present Wassermann examination card for tests made at the State Board of Health laboratories, omitting the indigent clause and substituting the following: "The circumstances of this examination are such that I believe that it should be made without charge." This statement is to be signed by the physician and all positive serological tests are to be reported to the State Board of Health.

Subsidizing Pathological Laboratories

After a long debate, the House adopted the recommendations of its Reference Committee on Hygiene and Public Health "that legislation be sponsored to define laboratory practice to the end that competent laboratories be located at strategic points throughout the state to serve the profession and that these laboratories be in the hands of private physicians specializing as pathologists, and that legislation be sought to enable the State to compensate these laboratories for the work done for indigent patients."

Study of Mileage Charges for Rural Calls

The House adopted a resolution introduced by Dr. George Dillinger "that each constituent county medical society be requested to study the problem of mileage charges for rural calls to determine whether or not the rural patient is paying more for medical service than patients of the same financial status in urban areas."

Creation of a Liaison Committee to Work with the Indiana Crippled Children's Bureau

A few weeks previous to the French Lick session upon the authority of the Executive Committee, the president created a liaison committee of the Indiana State Medical Association to act with the Indiana Crippled Children's Bureau. Up to this time no official committee had existed to act upon behalf of the State Medical Association with the State Crippled Children's Bureau. Dr. Oliver Greer, head of the Crippled Children's Bureau, had, however, appointed a technical advisory committee composed of the following men: Drs. R. L. Sensenich, South Bend, chairman; I. C. Barclay, Evansville; F. S. Crockett, Lafayette; C. J. Clark, Indianapolis; John H. Green, North Vernon; Leonard A. Ensminger, Indianapolis, and Louis D. Belden, Indianapolis. This committee was authorized to act officially for the State Association, and this action was upheld by the House of Delegates.

Approval of Work of Executive Committee

The House voiced its approval of the stand taken by the Executive Committee throughout the year for its work in:

(1) Battle against socialized medicine;
(2) Stand in regard to tuberculosis clinics;
(3) Stand on health cooperatives;
(4) Investigation of group hospitalization, and
(5) Condemnation of "the formation of medical societies other than county and district societies which form an integral part of the State Association, knowing full well that a multiplicity of societies must detract from county and district societies."

The recommendation of the reference committee in regard to these points was approved by the House.

Limitation of Automobile Speed

The House approved the report of the Committee on Traffic Accidents which recommended the support of "Federal laws prohibiting the manufacture of powerful, high speed motors, which laws will make speed above an acceptable and safe rate impossible." Pending in Congress at the present time is a law which would limit the manufacture of motors which will go over fifty miles an hour.

Reduction of Number of Committees

The House went on record suggesting that "due to the many new activities in the State Association, a change would facilitate action by the society at its annual meeting—that is, to coordinate existing committees to reduce the number thereby."

Presentation of Resolutions

In order to facilitate the work of the House of Delegates, the House recommended that "all resolutions presented for passage at the state meeting be in the hands of the executive secretary one week before the date of the convention in order that they might be sent to the proper committees for their consideration on the first day of the convention."

Study of Infant and Puerperal Mortality

The House approved the report of the sub-committee of the State Board of Health Liaison Committee which recommended the study of maternal morbidity and mortality rates in Indiana. This means that physicians will be asked to fill out questionnaires upon maternal and infant deaths when they occur. The House recommended the

full cooperation of the physicians of the state in this matter.

Training of Public Health Nurses

The House approved the suggestion contained in Dr. Clark's address that the training of public health nurses which is to be given at Indiana University should be given by physicians familiar with the subject rather than by social service workers lacking the necessary medical education.

Resolution to Create a Committee on Cancer to Cooperate with the American Society for the Control of Cancer and "to coordinate and direct the activities of the Women's Field Army of the American Society for the Control of Cancer as it functions in this State" was approved by the House of Delegates with the understanding that the Bureau of Publicity should act as that committee and that no new committee should be appointed.

Graduate Education

The House approved the report of the Committee on Graduate Education and recommended that the subject of regional postgraduate meetings be given some study.

Action on Health Cooperatives

The House of Delegates approved a resolution introduced by Dr. Herman Morgan, chairman of the Marion County Medical Society delegation, providing that each county medical society be urged to do everything in its power to prevent its members from taking part in various so-called health cooperative plans.

Joint Midwinter Meeting with Northwest Conference of State Secretaries

The Committee on Secretaries' Conference decided to hold the annual county society secretaries' conference in Chicago this winter in connection with the Northwest secretaries' conference. The Northwest conference is composed of officers of the Ohio, Illinois, Michigan, Minnesota, Wisconsin, North and South Dakota, Iowa and Indiana state associations. Indiana acts as host to this conference this year and the midwinter meeting of the secretaries' conference will be held in conjunction with the Northwest session.

RESOLUTIONS FAILING TO PASS

1. Creation of a New Section. Resolution to create a Section of Obstetrics and Gynecology rejected by House of Delegates.

2. Prorating of Dues. A resolution that the dues for admission to membership in the Indiana State Medical Association after July first of any year shall be prorated was introduced by Dr. W. C. Wright, of Fort Wayne. The Reference Committee on Miscellaneous Business to which this resolution was referred moved that it be tabled, and the House of Delegates upheld the report of its committee, thereby defeating the resolution.

ACTIONS TAKEN BY COUNCIL

(1) **Study of Cult Practices.** The Council recommended that the legislative committee study the use of physical therapy treatment measures by chiropractors and other cultists and devise ways and means of attacking this problem.

(2) **Bids Open for Publication of JOURNAL.** The Council recommended that the Executive Committee obtain bids for the publication of THE JOURNAL in 1938.

(3) **Midwinter meeting** of the Council set for January 16, 1938.

(4) **Resolution Against Federalized Medicine.** The Council instructed the legislative committee to prepare a resolution opposing Senate Joint Resolution 188 which was presented by Senator J. Hamilton Lewis to license doctors federally.

(5) **Changes in Editorial Board.** The Council increased the editorial board to six members and reduced the term of each member from five to three years.

ABSTRACT

CARDIOVASCULAR SYPHILIS: CLINICAL LECTURE AT ATLANTIC CITY SESSION

JAMES E. PAULLIN, Atlanta, Ga. (*Journal A. M. A.*, Oct. 2, 1937), claims that involvement of the cardiovascular system accounts for a large group of persons who suffer the most disabling effects of latent syphilis. Syphilitic aortitis, from the standpoint of the pathologist, is a disease recognized far more frequently at necropsy than in the clinic. Its incidence in different parts of the country varies with the character of the population. Since syphilitic infection is far more prevalent in Negroes than in other races and since it occurs more frequently among the ignorant and the indigent, it naturally follows that aortitis is most commonly found in these groups. From statistical data collected by Turner it would seem that approximately 10 per cent of all patients with latent syphilis will have demonstrable cliincal evidence of cardiovascular involvement. In a series of 6,253 cases of syphilis in a late stage collected by the Cooperative Clinical Group, aproximately 619 or 10 per cent, of the patients had cardiovascular syphilis on admission or acquired it later. The wonder is that a far greater number did not give clinical manifestations. Warthin and his associates have observed at autopsy that the aorta is involved, either macroscopically or microscopically, in approximately 90 per cent of persons with latent syphilis. The age group most frequently affected is that between 30 and 55 years, although cases may occur earlier and some even later. Every person who has syphilis is an excellent candidate for cardiovascular involvement. If every person who acquires syphilis could receive the benefits of adequate treatment, such as has been outlined by the Cooperative Clinical Group, there would be few patients with cardiovascular manifestations of latent syphilis. A patient with cardiovascolar syphilis should be subjected to the usual forms of treatment that are prescribed for any patient with heart disease. As to specific treatment, patients may be divided into two groups, those who have a normally functioning myocardium and those who have congestive heart failure. If the patient when first seen has cardiovascular syphilis and congestive heart failure, antisyphilitic treatment must be undertaken with the greatest care. Potassium iodide is given by mouth as soon as possible and smaller doses of the heavy metals at weekly intervals.

MEDICO-LEGAL

WORKMEN'S COMPENSATION LIABILITY FOR OFFICE EMPLOYEES OF PHYSICIANS

ALBERT STUMP
Attorney for the Indiana State Medical Association

Under "The Workmen's Compensation Act" every employer and every employee, with certain exceptions, are presumed to act under and are bound by the Compensation Act, unless notice is given in the prescribed manner of election not to operate under the Act. The stated exceptions are "railroad employees engaged in train service" (Burns 1933, Section 40-1202); casual laborers, farm or agricultural employees, and domestic servants (Burns 1933, Section 40-1209).

Inasmuch as office employees of physicians are not within any of the exceptions under the Act, the physician as their employer, comes under the Act. *But the physician may, as an employer, elect not to operate under the act,* and may reject its provision for the payment of compensation.

To do so he must give notice in print or in writing of his exemption of the Act at least thirty days prior to any accident resulting in injury or death of his employee either by serving them personally with a copy of the notice or by posting the same in a conspicuous position in the place of employment. Within five days after the serving of notice upon the employee, a copy of the notice must be filed with the Industrial Board. This form is prescribed and furnished by the Industrial Board and is given the designation of Form 1.

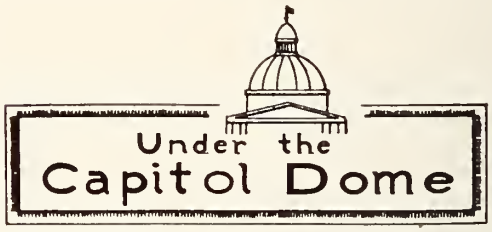
If the physician elects to adopt the latter course he is subject to suit for any injury or death to his employees from accident resulting from his negligence, and under the Act is deprived of the defenses of

1. Negligence of the employee,
2. Negligence of fellow-employees, and
3. Assumption of risk by the employee.

BURNS 1933, SECTION 40-1210

If the physician wishes to be bound by the Act and still avoid carrying compensation insurance, he may apply for and secure a certificate of financial ability to pay compensation directly without insurance. Application for this certificate is made on Form 20 of the Industrial Board, and requires a full disclosure of the kind of employment, the number of actual employees for the last six months, the estimated wage expenditure for the next six months, the assets of the physician, the sanitary, safety and welfare conditions of the place of employment, the character and condition of the building, the past experience with regard to accidents, and a promise to fully discharge by cash payments all installments of compensation that may be incurred in the future. The Board, in its discretion, before issuing such certificate may require the deposit of acceptable indemnity bond or security to secure the future payment of compensation. The certificate, when granted, is for a fixed period and may be revoked upon ten days notice and hearing before the Industrial Board.

The physician not rejecting the provisions of the Act by giving notice by Form 1 as set out above, or not procuring a certificate of financial ability by filing the application on Form 20, is required to insure and keep insured his liability as prescribed by the act. (Burns 1933, Section 40-1601, 1205.) In such case, under Section 40-1602, Burns 1933, the failure of the physician to comply with the provisions of the Act in regard to procuring insurance coverage renders him subject to a fine of ten cents for each employee for each day that he fails to have such insurance coverage, and he is liable during all of this period for the payment of compensation the same as if he had procured the necessary insurance. We do not find any cases, however, where the penalty has been invoked under such circumstances in regard to office employees.



Four district public health headquarters which were established during the flood last winter have been put on a permanent basis, Dr. Verne K. Harvey, secretary of the State Board of Health, has announced.

These units were swung into operation as an emergency measure to protect public health during the dangerous days of the flood and reconstruction period. But they have operated to such good advantage, and have met a definite need in the areas to such an extent, that placing them on a permanent basis seemed the logical thing to do, Dr. Harvey said.

Recently another district headquarters, exactly like the ones already established, was put into operation. The new one is at Bloomington and serves Monroe and Brown Counties.

The district headquarters previously established were at Rising Sun, New Albany, Huntingburg, and Princeton. The staff of each unit comprises one director who is a licensed physician; a chief public health nurse, two sanitarians, and one office clerk.

The program carried out by the district offices comprises a general sanitation work, supervision of sanitary conditions in eating places, and

moulding an immunization campaign against communicable diseases, as well as other phases of public health activities.

Dr. Verne K. Harvey, secretary of the Indiana State Board of Health, has announced that the board has adopted the exclusion test for syphilis, and as a result, hundreds more tests should be given annually. The board's action was in line with similar action taken by private pathologists as a cooperative move in the campaign against venereal disease. Dr. Harvey said he believes the action is the greatest single step taken against syphilis in Indiana.

Dr. Harvey pointed out that heretofore both the state health board and private pathologists generally have used the Wassermann, the Kahn, and the Kline tests as a routine matter, but under the new plan only the Kline or Kahn test will be given except where a positive reaction occurs in the initial test. Thus in negative response cases the cost of the two additional tests will be eliminated, allowing more persons the advantage of the blood test for the same cost to the state.

The plan, new to the Indiana health board, has been used successfully for many years by the Mayo Clinic and the Michigan State Health Board and the United States Navy, Dr. Harvey said.

Dr. Harvey said that the private pathologists, by adopting the plan which reduces the cost to persons taking tests, "have demonstrated beyond all doubt their altruistic attitude and have entered the campaign with the spirit of putting aside private interests."

Infantile paralysis is declining rapidly in Indiana, according to reports released by Dr. Verne K. Harvey, secretary of the State Board of Health. On October 15 four cases were reported as extant in the state. A week previously there were eight cases, and a year ago ten. The cases reported for October 15 were one each in Grant, Madison, Montgomery, and St. Joseph Counties. All were in urban areas.

Dr. J. T. Oliphant, of Farmersburg, has been appointed to the State Board of Medical Registration and Examination to fill the remaining position on the board. Other members of the present board are: president, L. C. Sammons, M.D., Shelbyville; vice-president, D. O. Peterson, D.O., LaPorte; secretary, J. W. Bowers, M.D., Fort Wayne; treasurer, Will C. Moore, M.D., Muncie; N. E. Harold, M.D., Indianapolis; H. K. McIllroy, D.C., Indianapolis, and Ruth V. Kirk, executive secretary.

Mr. W. H. Frazier, of Bluffton, who has been assistant to Dr. Verne Harvey in the Indiana State Board of Health, has been made secretary of the State Stream Pollution Board. Mr. Frazier's successor as assistant to Dr. Harvey has not been appointed.

INTERNAL REVENUE

Internal Revenue Collections for the District of Indiana showed an increase of $10,845,624.92 during the first quarter of the current fiscal year over the same period of the previous year. Total collections for the three-month period, July, August, and September, 1937, were $28,945,875.82 as compared to $18,100,250.90 for the first quarter of last year and $17,836,554.51 for the same period of 1935. A break-down of the most important items on a comparative basis to the collections for the first quarter of the preceding fiscal year is as follows:

	1936	1937
Individual Income Tax	$1,876,441.72	$3,240,448.83
Corporation Income Tax	3,118,699.76	4,886,775.52
Distilled Spirits Tax	5,344,258.44	9,031,152.46
Beer Tax	3,619,880.04	3,173,601.50
Estate Tax	310,184.36	1,212,745.04
Electrical Energy Tax	178,082.24	216,429.82
Autos and Parts Tax	353,921.02	568,012.13
Capital Stock Tax	1,844,727.82	1,906,810.43
Gift Tax	1,295.42	15,472.00
Admissions and Dues	102,542.78	112,089.25
Social Security Tax	———	2,782,471.24

VOICE OF MEDICINE

RE: APPOINTMENTS OF THE INDIANA STATE MEDICAL ASSOCIATION*

I have examined this report* with considerable interest since I had undertaken a study of this question in re the Dearborn Ohio County Society and the Fourth District Society some time ago, but unfortunately, the tabulations I had made as a result of that study were lost during the flood. The headquarters office was kind enough to send me at that time a complete list of all appointments for the past fifteen years.

On examining the present article, Fourth District seems to have had the smallest number of appointments, three counties having had none and one being a starred county. Of those counties bearing a star, there are three who do not have a regular time of meeting and three others who meet twice a month. One meets every two months and two of them combine to have one meeting a month.

* Journal Indiana State Medical Association, Vol. 30, No. 10, p. 547.

A conclusion suggested by the statistician, that the degree of local interest in state affairs may have some bearing, is quite natural and yet does not seem to be fully carried out in the counties mentioned. I do not believe that the question of animosity toward the powers that be, nor the matter of inertia are very important factors speaking only from my observation of our own county and district organization. We have an excellent attendance at each of our county meetings. Our county society attendance at district meeting is almost 100%. I think that over 50% of our members attend every state meeting, and we always have a good representation at special meetings such as postgraduate, secretaries' conferences and special demonstrations.

This certainly testifies to our own interest in at least the scientific end of our association. In our own district, the Councilor has been selected almost invariably from one of three of the nine organizations comprising the district. Two of those counties, however, have been honored by the Presidency of the State Medical Association.

Our attendance at the present session of the state association at French Lick, I feel, will be small due to the fact that railroad accommodations are poor from this county and the hazards of motoring make it undesirable to drive.

The statement that the county society is the essential unit in state organization and that the county secretary is the backbone of that unit is, I think, undebatable. Perhaps it would be desirable for the Committee on Constitution to consider the advisability of appointing a secretary for a period of not less than three, and preferably five years, certainly in some of the larger counties. He is the only one in the county organization in intimate contact with the state officials. I think the same thing holds true with the delegates to the state meeting inasmuch as certain business matters presented before the House of Delegates must require more than one annual meeting for their consideration. Having been secretary of our local society for a period of several years, I feel that I was of more value to the society in that office than if it had been limited to one year.

I sincerely hope that this study will be continued and that it will include a large number of correlated factors such as the relation between the population of physicians and inhabitants of the community, accessibility of a common meeting place in counties having no organization, the relation of the younger group of physicians to the medical center from which they receive their education, the lack of, or extent of, cooperation between the older and younger physicians in each county unit, etc.

I realize this is a huge task, but I think it is of vital concern, particularly at this time when there is so much talk of "State Medicine."

Edwin L. Libbert, M.D.

DEATHS

J. S. Malloy, M.D., of Indianapolis, died September twenty-sixth, aged seventy-nine years. Dr. Malloy had not been active in his profession for many years. He graduated from the American Medical College of Indianapolis in 1896.

W. A. Patton, M.D., of Orleans, died at the Mayo Clinic in Rochester, October ninth. Dr. Patton was sixty-eight years old and had practiced medicine in Orleans for forty-one years, having established himself there immediately after his graduation from Louisville Medical College in 1896. He was a member of the Orange County Medical Society, the Indiana State Medical Association and the American Medical Association.

J. W. Rutter, M.D., of Poseyville, died October second, aged eighty years. Dr. Rutter was a graduate of the Eclectic Medical College of Cincinnati in 1881. He had retired from active practice.

Charles A. Tindall, M.D., of Shelbyville, died October ninth, aged seventy years. Dr. Tindall graduated from the Eclectic Medical College of Cincinnati in 1887 and had served as the secretary of the Shelbyville Board of Health. He was a member of the Shelby County Medical Society, the Indiana State Medical Association and the American Medical Association.

John E. McFarland, of Millgrove, died October thirteenth, aged eighty-nine years. Dr. McFarland was licensed in 1897, and he had been inactive for several years because of infirmities due to age.

Robert L. Holaday, M.D., of Paoli, died October twenty-first. Dr. Holaday was sixty-seven years old. He was a member of the Orange County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Hospital College of Medicine, Louisville, Kentucky, in 1896, and had practiced in Orange and surrounding counties since that time.

HOOSIER NOTES

Dr. William E. Jenkinson, of Mount Vernon, has moved to his new quarters at 222 Walnut Street.

Dr. D. E. Gray, of Crown Point, has opened a new office on South Main Street, completely modern in appearance and equipment.

Dr. M. F. Daubenheyer recently moved from Patriot to Holton, Indiana.

Indiana physicians are invited to attend the meeting of the Southeastern Branch Society of the American Urological Association at Birmingham, Alabama, November 5 and 6.

The Mississippi Valley Medical Society offers a cash prize of $100, a gold medal and a certificate of award for the best unpublished essay on a subject of interest and practical value to the general practitioner of medicine. Manuscript must be submitted not later than May 15, 1938. Details may be secured from the secretary, Harold Swanberg, M.D., 209 W. C. U. Bldg., Quincy, Illinois.

Dr. E. D. Bixler is building a new office building in Berne, Indiana. The building will be 20 by 36 feet. Construction was started in September.

Dr. T. D. Rhodes, of Indianapolis, was the guest speaker for the Greenfield Kiwanis Club, October first. His subject was "Combating Syphilis."

Dr. C. B. Thomas, of Plainfield, and Miss Artelia Tomlinson were married in October.

Dr. Roy E. Whitehead, of Indianapolis, has resigned his position as chief of the medical section of the Bureau of Air Commerce which he held for nearly four years. Dr. E. S. Adams has been made acting chief to replace Dr. Whitehead.

Dr. L. W. Brown, of Indianapolis, attended the annual meeting of the Association of Surgeons of the Pennsylvania Railroad in Pittsburgh, October 1 and 2.

The next examinations for group B candidates for the American Board of Obstetrics and Gynecology will be held Saturday, November 6, 1937, and Saturday, February 5, 1938. Application for admission to examinations must be filed on an official application form at least sixty days prior to examination date. For further information and application blanks, address the secretary, Dr. Paul Titus, 1015 Highland Building, Pittsburgh, Pennsylvania.

Dr. James V. White, of Rosedale, and Miss Martha Quick, of Rochester, were married September eighteenth.

At the recent meeting of the American Hospital Association in Atlantic City, Mr. Robert E. Neff, of Iowa City, was elected president for the year, succeeding Dr. Claude W. Munger, of New York. Mr. Neff formerly was administrator of the Indiana University hospitals in Indianapolis.

Dr. and Mrs. W. L. Starr, of New Albany, celebrated their fiftieth wedding anniversary, September twenty-eighth. Dr. Starr retired from active practice last summer after practicing fifty-five years.

An award of merit recently was presented to the Indianapolis City Hospital by the American Hospital Association in recognition of the program arranged by the hospital for National Hospital Day last May.



Dr. Welsch

Dr. Exie Welsch is the physician who has been selected by the Indiana State Board of Health to take charge of the Division of Mental Hygiene of the Indiana State Board of Health. The mental hygiene program for indigent children in Indiana will be worked out under the supervision of the Bureau of Maternal and Child Health of the Board of Health and the Indiana University School of Medicine, as outlined in last month's JOURNAL on page 544.

Indianapolis Medical Society (Medical Society of Marion County) has changed its meeting place to the Indianapolis Athletic Club where all future meetings will be held.

Effective with the January, 1938, issue, the title of *Colorado Medicine* will be changed to *Rocky Mountain Medical Journal*, and at the same time, the magazine will become the official journal of the Utah State Medical Association, and all members of that Association will become paid subscribers to the *Rocky Mountain Medical Journal*. The magazine will continue to represent the Colorado State Medical Society, the Wyoming State Medical Society, and the Colorado Hospital Association.

Dr. M. P. Hollingsworth, of Princeton, and Dr. J. W. McGowan, of Oakland City, were awarded honorary memberships in the Gibson County Medical Society and the Indiana State Medical Association at the monthly meeting of the county society held at the Hotel Emerson, in Princeton, October eleventh. Each physician has practiced medicine for more than fifty years and has been a member of the Indiana State Medical Association for more than twenty years.

Governor M. Clifford Townsend assisted in dedication ceremonies for the Knox Tuberculosis Hospital at Vincennes, October twentieth. The hospital was opened September first, and nineteen of its available thirty-seven beds are now occupied.

PATHOLOGISTS AID ANTI-SYPHILIS CAMPAIGN

The Indiana Association of Pathologists in their annual session at French Lick went on record as being ready to cooperate to their fullest extent in the present campaign for the eradication of syphilis. The Association therefore approved the report of the syphilis committee of the Indiana State Medical Association.

To further promote the campaign for the eradication of syphilis, the Association adopted a resolution that a special exclusion test for the diagnosis of syphilis be made available at the fee of one dollar. It is the desire of the Association to make this valuable test possible as a routine examination of every new patient, and still be within the means of all.

The following officers were elected for the ensuing year:

Dr. A. S. Giordano, South Bend, president,

Dr. Frank Hunter, Lafayette, vice-president,

Dr. C. G. Culbertson, Indianapolis, secretary-treasurer.

LIBRARY SERVICE FOR PHYSICIANS

The Extension Division of Indiana University now is offering library service to the physicians of Indiana. Material has been collected and classified with a view to furnishing an easily accessible medical loan library service to Indiana physicians. There is no charge for the service except for postage.

The material for the files is obtained through the cooperation of the Indiana State Medical Association and consists of pamphlet and periodical materials (no books) which are listed in the *Cumulative Index Medicus* of the American Medical Association. The Extension Division does not issue any list of subjects. However, a direct request for information will be answered on the same day that it is received, and if the material requested is available, it will be mailed out on the same day that the request is received. The loan period is two weeks, subject to renewal.

The future development of the medical library service will be determined by the degree to which physicians avail themselves of it and find it useful. Your request, naming your subject and giving sufficient details about the specific phase of it on which you desire information to make possible an intelligent selection of material, should be addressed to Package Library Bureau, Extension Division, Indiana University, Bloomington, Indiana.

AUXILIARIES

An auxiliary to the Dubois County Medical Society was organized when a meeting was held in Huntingburg, September thirtieth. The meeting was held at the home of Dr. and Mrs. H. C. Knapp. Officers were elected as follows: Mrs. H. C. Knapp, president; Mrs. C. A. Hicks, vice-president; Mrs. H. K. Stork, secretary-treasurer.

"The Responsibility of the Physician's Wife" was the topic discussed by Dr. Charles P. Emerson at a meeting of the Marion County Women's Auxiliary October fifteenth, at the St. Vincent's Hospital nurses' home auditorium. Reports of the French Lick meeting were made.

The first fall meeting of the Madison County Medical Society Auxiliary was held in the Peter Pan dining room in Anderson, September twentieth.

Mrs. August S. Kech, of Altoona, Pennsylvania, national president of the Woman's Auxiliary to the American Medical Association, attended a meeting of Marion county auxiliary members at the Woodstock Club in Indianapolis, September thirteenth. Past presidents of the Marion county organization were honor guests with Mrs. Kech.

The auxiliary to the Floyd County Medical Society gave a benefit card party, September twenty-fourth, at the home of Mrs. William Garner, in New Albany. The purpose was to raise funds for new draperies in St. Edward's Hospital.

"YOUR HEALTH!"

The American Medical Association and the National Broadcasting Company present each week over the Red network a program of dramatized health messages intended to furnish graphic supplementary material for health teaching in junior and senior high schools. Much of this material also is useful for elementary schools, especially the higher grades. The program is broadcast each Wednesday from 1 to 2, Central standard time. Since this is a noncommercial program, any station may or may not broadcast the program. Evidence of local interest may have influence with station managements. The programs were begun on October 13 and may be heard from

Indiana stations WIRE — Indianapolis, WGL — Fort Wayne, WBOW — Terre Haute, WGBF — Evansville, and from nearby stations WLW — Cincinnati, WAVE — Louisville, WMAQ — Chicago, WWJ — Detroit, WTAM — Cleveland, and WEAF — New York.

The dates and topics of weekly broadcasts through November and December will be as follows:

November 3—"Striving for Better Bodies." So-called physical defects; their recognition; what can be done about them.

November 10 — "Playing for Fun." Health values and hazards in sports and recreation, including football.

November 17—"Fresh Air, Fresh Clothes and Fresh Skin." Ventilation; clothing; bathing.

November 24—"Rest, Relaxation, Refreshment." All work and no play, or all play and no rest—bad for health.

December 1 — "Tuberculosis, Foe of Youth." How bad habits of hygiene and unwise living, plus infection, favor tuberculosis.

December 8—"It Takes All Good Foods." A well rounded diet and how to get it.

December 15—"Vitamins, Minerals and Common Sense." More about a balanced diet in special relation to minerals and vitamins.

December 22—"Dietary Fads." Facts vs. fallacies in relation to prevalent false notions on diet.

December 29 — "Milk from Farm to Table." The production, transportation, pasteurization and home care of milk; its place in the diet; processed milks.

TWELFTH DISTRICT MEETING

The Twelfth Councilor District will hold its annual meeting at the Fort Wayne Chamber of Commerce on November 16th, 1937, at 4:00 p. m.

Program

4:15 P. M.—"More Common Forms of Heart Disease," Dr. Robert S. Berghoff, Loyola University Medical School, Chicago.

5:00 P. M.—"Female Endocrinology—Practical and Therapeutic Considerations," Dr. E. D. Plass, Professor of Obstetrics and Gynecology, Iowa State University.

6:30 P. M.—Dinner, for physicians, families, and guests.

8:00 P. M.—Address by Dr. Logan Clendening, Professor of Medicine, University of Kansas.

The Bureau of Maternal and Child Health of the Indiana State Board of Health aided materially in the arrangement of this fine program.

SEVENTH DISTRICT MEETING

The Seventh District meeting will be held at the Danville Court House, Wednesday, November third, at two o'clock.

The program will include a round-table discussion on pneumonia with the following participants: Dr. J. A. MacDonald as chairman; Dr. John Cunningham to discuss "Treatment," Dr. Frank Ramsey to discuss "Surgery," Dr. Alfred Henry to talk on "The Pneumonia of Tuberculosis," Dr. Ralph Lochry to talk on "X-Ray," Dr. Marlow Manion to discuss nose and throat complications, and Dr. Clyde Culbertson to talk about "Laboratory Findings."

A paper on "Sulfanilamide" will be presented by Dr. Gerald F. Kempf.

Dr. G. W. Kohlstaedt will present a paper on "Medical Treatment of Gallbladder Disease."

"Common Foot Ailments and Their Treatment" will be discussed by Dr. William V. Woods.

At six o'clock an old-fashioned banquet will be served, following which the visiting guest speaker, Dr. Archibald Hoyne, of Chicago, will read a paper on "Poliomyelitis."

This program has been arranged through the cooperation of the Seventh District Medical Society and the Bureau of Maternal and Child Health of the Indiana State Board of Health.

THIRTEENTH DISTRICT MEETING

The Thirteenth District Medical Society will hold its meeting on Wednesday, November third, in Mishawaka.

In the forenoon, the staff of St. Joseph Hospital will conduct a clinic at the hospital, and lunch will be served there at noon. The afternoon meeting will be held at the Mishawaka Hotel, and the following program will be presented:

"Interpretation of Some of the Common Laboratory Tests as Applied in General Practice," by Dr. A. S. Giordano, South Bend.

"Management of Acute Surgical Conditions of the Abdomen," by Dr. C. A. Nafe, Indianapolis.

"Obstetrics," by Dr. Robert Wilkins, Fort Wayne.

Following the dinner meeting in the evening, Dr. E. D. Clark, of Indianapolis, president of the Indiana State Medical Association, will speak, and Dr. Charles A. Elliott, of Northwestern University Medical School will talk on "Cardiac Handicaps."

Members of the Indiana State Medical Association are invited to attend this meeting.

INDIANA UNIVERSITY NEWS NOTES

In the reorganization plan of the Department of Psychiatry of Indiana University School of Medicine, a new Department of Child Psychiatry has been established. This department has been created through the cooperation of the Indiana State Board of Health and the Indiana University School of Medicine.

The new department, cooperating with the Department of Pediatrics at the Riley Hospital, is to be under the direction of Dr. Exie E. Welsch, who has lately returned to Indiana following her studies in the Phipps Psychiatric Department of Johns Hopkins University, Baltimore, Maryland. Dr. Welsch is a native of Benton County, Indiana, graduating from Fowler High School in 1926. She received her doctor's degree from Indiana University in 1932. Following her graduation, she received her internship training at the City Hospital, Indianapolis, going East in 1933 to begin her studies in psychiatry at Johns Hopkins University. During the past two years Dr. Welsch has been associated with the Philadelphia Child Guidance Clinic.

Phi Rho Sigma, professional medical fraternity at Indiana University, has announced the pledging of the following medical students: Richard Pryor, Bloomington; Thomas Young, Indianapolis; Roy Pearce, Terre Haute; Robert Switzer, Cromwell; Lee Brayton, Indianapolis; William Krieble, Terre Haute; William Downs, Bloomington.

The following medical students have been pledged by the Nu Sigma Nu profesisonal medical fraternity: Joe Boughman, Kokomo; Philip Rothrock, Bloomington; Chester Morris, Tipton; Jack Hannah, Rising Sun; Irwin Hostetter, Roachdale; Lowell Henderson, Kokomo; Dick Michener, Kokomo; Robert Axtell, Indianapolis; Edgar Higgins, Fort Wayne; Roland Reppert, Decatur; Ottis Olvey, Noblesville; John Bretz, Huntingburg, and Bill Hendrick, Indianapolis. Dr. Robert I. Hill, of the medical school faculty, also was elected to membership in Nu Sigma Nu.

The Phi Beta Pi professional medical fraternity has chosen for its new members: Carroll Hasewinkel, Elberfeld; Robert Fenneman, Evansville; James Mitchell, Richmond; Earl Bayer, Rolling Prairie.

William H. Beaty, of French Lick is the newly elected president of Phi Rho Sigma. Donald Hampshire, of Waterloo, has been elected vice-president, John Miklozek, Terre Haute, secretary, and Donald McCartney, of Fairmount, treasurer.

INDIANA STATE BOARD OF HEALTH

BUREAU OF COMMUNICABLE DISEASES

Monthly Report, September, 1937

Diseases	*Sept., 1937*	*Aug., 1937*	*July, 1937*	*Sept., 1936*	*Sept., 1935*
Tuberculosis	185	181	487	167	130
Chickenpox	16	16	39	6	33
Measles	29	72	588	17	19
Scarlet Fever	149	82	138	136	229
Smallpox	8	15	29	0	1
Typhoid Fever	19	26	42	46	61
Whooping Cough	156	131	330	42	123
Diphtheria	42	24	42	41	177
Influenza	45	13	21	33	93
Pneumonia	26	35	31	19	83
Mumps	4	9	26	18	17
Poliomyelitis	49	34	31	13	10
Meningitis	1	5	5	5	8
Septic Sore Throat	2	0	0	0	0

BOOKS

BOOKS RECEIVED

MANUAL OF HUMAN DISSECTION. By Edwin M. Shearer, Ph.D., Associate professor of Anatomy, New York University College of Medicine. 321 pages, illustrated with original drawings by the author. Washable cloth binding. Price $4.25. P. Blakiston's Son and Co., Inc., Philadelphia, 1937.

* * *

PHYSICAL THERAPY in ARTHRITIS. By Frank H. Krusen, M.D., associate professor of physical medicine, The Mayo Foundation, University of Minnesota, and head of the Section on Physical Therapy, The Mayo Clinic. 179 pages with 21 illustrations. Cloth. Price $2.25. Paul B. Hoeber, Inc., New York, 1937.

* * *

SYNOPSIS OF GENITOURINARY DISEASES. By Austin I. Dodson, M.D., F.A.C.S., professor of genitourinary surgery, Medical College of Virginia. Second edition. 294 pages with 112 illustrations. Fabric binding. Price $3.00. C. V. Mosby Company, St. Louis, 1937.

ILEITIS — Dr. Rosenak

(Continued from Page 572)

Long periods of disability and frequent fatal outcomes following incorrect diagnoses are sufficient to indicate importance of thorough investigation of patients having the condition. At present the only hope of preventing an inoperable condition is early and efficient surgery. Attempts to treat with deep radiation have not been promising.

Dr. Rosenak's paper leaves very little for discussion, as he has not only brought literature up to date but has not introduced any phases of controversy. It seems that the real contribution consists in calling attention to the similarity of the symptoms and pathology of this disease and that of other conditions so that these cases may be managed to avoid the long period of disability and fatal outcomes.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION
THE COUNCIL

First Meeting

(French Lick Session, October 4, 1937)

The Council of the Indiana State Medical Association convened in the north dining room of the French Lick Springs Hotel, French Lick, Indiana, at 12:30 p.m., October 4, 1937. The meeting was called to order by Dr. M. A. Austin, of Anderson, chairman of the Council. Roll call showed the following present:

Councilors

1st district—I. C. Barclay, Evansville.
2nd district—H. C. Wadsworth, Washington.
3rd district—H. C. Ragsdale, Bedford.
4th district—M. C. McKain, Columbus.
5th district—O. O. Alexander, Terre Haute.
6th district—Samuel Kennedy, Shelbyville.
7th district—C. J. Clark, Indianapolis.
8th district—M. A. Austin, Anderson.
9th district—F. T. Romberger, Lafayette.
10th district—N. K. Forster, Hammond.
11th district—Ira Perry, North Manchester.
12th district—A. J. Sparks, Fort Wayne.
13th district—W. B. Christophel, Mishawaka.

Officers

President, E. D. Clark, Indianapolis.
President-elect, Herman M. Baker, Evansville.
Treasurer, A. F. Weyerbacher, Indianapolis.
Editor of THE JOURNAL, E. M. Shanklin, Hammond.

Executive Committee

C. A. Nafe, Indianapolis, chairman.
C. H. McCaskey, Indianapolis.
T. A. Hendricks, executive secretary.

Legislative Committee

Norman M. Beatty, Indianapolis.

By unanimous consent, the reading of the minutes of the mid-winter meeting of the Council, held in Indianapolis on January 17, 1937, was dispensed with, as these minutes were published in the February, 1937, issue of THE JOURNAL.

The annual councilor reports were accepted as printed in the September, 1937, issue of THE JOURNAL.

In discussing the continued conflict in district meeting dates, Dr. Austin suggested that councilors report dates for the next district meetings within thirty days. The following district meeting dates were announced:

3rd district—probably November 10.
9th district—May 17, 1938.
10th district—April 8, 1938.
11th district—May 18, 1938.
13th district—November 3, 1937.

Unfinished Business

The secretary read a letter from Dr. Forster regarding irregular practices by chiropractors:

> "After considerable correspondence with the State Board of Medical Registration and Examination, I find there are no laws which will prevent the practices referred to (use of physical therapy treatment measures by chiropractors), and it seems to me that the councilors, or the House of Delegates, of the State Association as a whole should do something in the way of revamping these laws, in order to take care of such situations."

Dr. Beatty called attention to the difficulties encountered, and said that Mr. Stump, attorney for the Association, has been working upon the problem for some time. The greatest difficulty arises in getting prosecutions for the co-operation of individual, local prosecuting attorneys cannot be obtained. Without this co-operation, we cannot hope to get anywhere. During the last legislature, it was necessary to spend our efforts in fighting off bills that were definitely planned to create more state medical practice.

Dr. Forster asked if there were not some way by which chiropractors could be restrained from using physical therapy measures. He mentioned the alliance of a chiropractor and a medical man, and asked if it is necessary to have a change in the medical practice act to enable the State Board of Medical Registration and Examination to revoke the license of such a medical man?

Dr. Beatty said that such a change is not necessary, that the present law is sufficient, but that, first, we must have evidence, and, second, someone to act on the evidence.

Dr. Forster suggested the co-operation of newspapers, and Dr. Beatty replied that it is difficult to get such co-operation because the irregulars spend money with them for advertising.

Dr. Ragsdale suggested that the best thing to do is to let the thing alone and the irregulars will hang themselves. Dr. E. D. Clark agreed with this opinion.

Dr. Sparks mentioned that the Fort Wayne society belongs to the Better Business Bureau which takes care of such work in their locality better than they can do it. After further discussion by Drs. Baker, E. D. Clark, and Beatty, Dr. Beatty recommended that the most important thing to do is to have county societies closely knit, and have some control over membership. Physicians must avoid making martyrs of these people.

Dr. C. J. Clark moved that the matter be left to Dr. Beatty's committee to devise ways and means of settling the matter satisfactorily. The motion was passed unanimously.

New Business

1. The report of the Auditing Committee as published in the handbook on page 99 was approved as published.

2. The secretary read a letter from the American Medical Association in regard to a physician who is a member in good standing in the State Association and yet appears to be a cancer quack. Inasmuch as the individual involved resides in Putnam County, the whole matter was referred to the councilor from this district, Dr. O. O. Alexander.

3. The secretary read a letter from the American Medical Asosciation in regard to membership of a physician whose license has been revoked because of narcotic violation. The local county society has not revoked the physician's membership, though he has lost his license to practice. After considerable discussion by Drs. Shanklin, Romberger, Austin, Ragsdale, and Clark, Dr. C. J. Clark made a motion that the secretary be instructed to send to the county medical society secretary information concerning the matter, together with the recommendation that the society revoke the man's membership. The motion was passed with the unanimous consent of those present.

4. Upon motion of Dr. Romberger, seconded by Dr. Perry, Dr. E. M. Shanklin was unanimously re-elected editor of THE JOURNAL for 1938. Dr. Barclay moved that Dr. Pierce MacKenzie succeed himself as a member of the editorial board to serve five years. The motion was carried unanimously.

5. The secretary announced that the Executive Committee recommends that THE JOURNAL be open for bids to begin with the January, 1938, issue. A letter from the present printers states that an increase of four per cent over present costs of printing the magazine may be expected within the next year, and with the previous increase of six per cent, this would make an increase within three years of ten per cent. Under such conditions, the Executive Committee felt that while THE JOURNAL is well done at present, and relationships with the printers are fine, it seems best to open the bids again.

After discussion by Drs. E. D. Clark, O. O. Alexander, Dr. Christophel made a motion that the matter be referred to the Executive Committee with power to act. Motion seconded by Dr. Romberger, and passed.

6. The secretary said that about twenty letters per year are received from secretaries, asking if there is any method of pro-rating dues for new members, newcomers to a county, or for members who have been out and are coming back in the middle of the year or later. After considerable discussion by Drs. Sparks, Romberger, C. J. Clark, Wadsworth, Christo-

phel, Shanklin, and Barclay, Dr. Barclay made a motion that the matter be left as it is at present. Dr. Romberger amended the motion to say that the matter be left to the discretion of the local society as to the pro-rating of local county society dues, but that no change be made in the present status concerning state dues.

Dr. Barclay's amended motion was presented again, and passed unanimously.

7. The third Sunday in January, January sixteenth, was selected as the date for the mid-winter meeting of the Council.

8. Matters referred to the Council by the Executive Committee for discussion or action:

a. See discussion under Item No. 6.

b. A resolution concerning the formation of a Health League in Indiana similar to California to act upon health and medical legislation was discussed. This is in short an organization built up by the profession with the assistance of laymen for the purposes of educating the public and informing the legislature. The matter was discussed extensively in Executive Committee meeting and was brought before the Council only for the purpose of information.

c. The formation of an inter-allied professional group in Indiana similar to that in North Dakota, suggested by Dean C. B. Jordan of Purdue and presented to the Executive Committee by Dr. F. S. Crockett was brought to the attention of the Council for informative purposes only.

d. The 1939 meeting of the Association will be the ninetieth annual meeting, and could be made a special anniversary meeting if thought advisable. The matter was not discussed.

e. For the information of the Council members, the change made in the Wassermann cards of the State Board of Health was mentioned. It is no longer necessary to certify that a patient is indigent. The action of the State Board of Health was taken at the suggestion of the State Committee on Syphilis. The secretary read a letter from Dr. Verne K. Harvey, Director of the State Board of Health, telling of the change in the card. This matter was purely informative and required no action.

f. Resolution from the Council of the Illinois State Medical Society was read:

"Resolved by the Council of the Illinois State Medical Society in Regular Session Assembled, That Senate Joint Resolution 188 (presented by Senator J. Hamilton Lewis to license doctors federally) is inimical to the best public interests, is un-American and unworkable, would result in monumental expenses without yielding compensating benefits, would lead to political corruption and tyranny and ought to be defeated; and, be is further

"Resolved, that copies of these resolutions be forwarded to the President of the United States, to each Senator and Representative in Congress from Illinois and to the Secretaries of the Medical Society of the several states."

Dr. C. J. Clark moved that a resolution similar to the Illinois resolution, be framed, and that the matter be referred to the chairman of the legislative committee, Dr. Norman Beatty. All present favored the motion except Dr. Ragsdale who said that he would make further comments in the House of Delegates.

g. The secretary read correspondence concerning the necessity of carrying compensation insurance upon office employees. It was stated that compensation laws require that anyone who employs even one person must carry compensation insurance upon that one person unless he files claim for exemption. After some discussion, it was suggested that the editor be instructed to publish informative material concerning this matter. Mr. Stump already has been instructed to prepare such information for publication in THE JOURNAL.

h. Dr. E. D. Clark reported that the Economy Mutual Health Association is having trouble to obtain a doctor since the physician there has left, and the Association now wants another doctor.

i. The annual conference of secretaries and editors will be held in Chicago, November 19 and 20. All officers and councilors are invited to attend that conference. At that time an extensive program on medical economics will be presented.

j. The following resolution from the Washington State Medical Association was read:

"Be it resolved, that the Washington State Medical Association request that the College of Surgeons make it a requirement for the rating of "standardized" for all hospitals that no one who is not a member of his local medical society be granted hospital privileges."

After some discussion by Drs. Beatty and Wadsworth, Dr. Wadsworth moved that the matter be tabled, and no further action was taken.

Dr. Romberger called attention to the action of the Executive Committee in condemning extraneous societies and recommended that instead of condemning such societies, they be encouraged to join with the local county group in the preparation of programs, etc. This was discussed by Drs. Wadsworth, Alexander, and Shanklin. Dr. Nafe expressed the belief that the wording of the recommendation probably had been misinterpreted, that the Committee intended to urge physicians to devote their energies in strengthening their local county and district societies, and that the Committee had no intention of using any power to enforce eradication of extraneous societies.

There being no further business, the Council was adjourned.

Second Meeting

(French Lick Session, October 6, 1937)

The second meeting of the Council was called to order at 10:00 a. m., Wednesday, October 6, 1937, in the west dining room of the French Lick Springs Hotel, French Lick, immediately upon adjournment of the final meeting of the House of Delegates.

The minutes of the previous meeting were not read.

Roll call showed the following members present:

Councilors

2nd District—H. C. Wadsworth, Washington.
4th District—M. C. McKain, Columbus.
7th District—C. J. Clark, Indianapolis.
8th District—M. A. Austin, Anderson.
9th District—F. T. Romberger, Lafayette.
10th District—N. K. Forster, Hammond.
11th District—Ira Perry, North Manchester.
12th District—A. Jerome Sparks, Fort Wayne.
13th District—W. B. Christophel, Mishawaka.

Officers

E. D. Clark, Indianapolis, president.

Herman M. Baker, Evansville, president-elect, 1937.

E. M. Shanklin, Hammond, editor of THE JOURNAL.

T. A. Hendricks, executive secretary.

Dr. Shanklin reported that the Editorial Board, in its meeting on Tuesday, October 5, had discussed the matter of limiting the terms of the Editorial Board members to three years, as suggested by various members of the Association, and increasing the board membership to six instead of five members as at present, and that the members of the Editorial Board were entirely in accord with these suggestions.

Dr. Forster moved "that the Editorial Board be increased to six members and that the term of each member be reduced to three years."

Dr. Romberger amended the motion "to include the prorating of the years of service of those already elected" and also added "that this matter be given the proper thought and final action be taken at the midwinter meeting."

Dr. C. J. Clark seconded the amendment, and it was passed unanimously. The motion made by Dr. Forster as amended was carried.

Mr. Hendricks spoke of the suggestion of Dean C. B. Jordan of Purdue University that an inter-allied professional association be formed in Indiana. This subject was discussed before the first meeting of the House of Delegates by Dr. F. S. Crockett who introduced a resolution asking that "the House of Delegates of the Indiana State Medical Association instruct the Council to appoint a committee of three to study and report in six months, the proposal to join with other allied professional groups of the state for a more satisfactory solution of their mutual problems." In order to get things under way, it was thought that the committee should meet

with Dean Jordan and present its recommendations to the Council at the midwinter meeting. The following committee membership was suggested: F. S. Crockett, G. A. Thomas, and F. T. Romberger, all of Lafayette.

The motion was made, seconded by Dr. Forster, and carried, that the invitation to meet with Dean Jordan be accepted.

Dr. Forster made the motion that the above named physicians be appointed members of the committee to confer with Dean Jordan. This motion was seconded by Dr. C. J. Clark, and carried.

Upon the motion of Dr. C. J. Clark, seconded by Dr. Romberger, the Council was adjourned.

THOMAS A. HENDRICKS,
Executive Secretary.

HOUSE OF DELEGATES

(French Lick Session, 1937)

First Meeting

The first meeting of the House of Delegates convened at four fifteen o'clock, Monday afternoon, October 4, 1937, in the main convention hall of the French Lick Springs Hotel, French Lick, the president, Dr. E. D. Clark of Indianapolis, presiding.

Dr. W. F. Carver, chairman of the Committee on Credentials, announced that a quorum of delegates was present, according to the signed attendance slips, and the chairman declared the House open and ready for the transaction of business. These slips showed the following present:

County	*Delegates*
Allen	M. R. Lohman, Fort Wayne
	William C. Wright, Fort Wayne
	M. B. Catlett, Fort Wayne
Bartholomew	A. M. Kirkpatrick, Columbus
Benton	V. L. Turley, Fowler
Boone	C. G. Kern, Lebanon
Cass	B. W. Egan, Logansport
Decatur	H. S. McKee, Greensburg
DeKalb	M. E. Klingler, Garrett
Delaware-Blackford	Charles L. Botkin, Muncie
Dubois	H. C. Knapp, Huntingburg
Elkhart	A. C. Yoder, Goshen
Fayette-Franklin	R. S. Sappenfield, Brookville
Floyd	P. H. Schoen, New Albany
Fountain-Warren	J. Carl Freed, Attica
Fulton	A. E. Stinson, Rochester
Grant	R. W. Lavengood, Marion
Hamilton	C. M. Donahue, Carmel
Hancock	Jesse E. Ferrell, Fortville
Harrison	William E. Amy, Corydon
Henry	Walter M. Stout, Newcastle
Huntington	R. G. Johnston, Huntington
Jackson	H. P. Graessle, Seymour
Jasper-Newton	A. R. Kresler, Rensselaer
Jefferson	S. A. Whitsitt, Madison
Jennings	D. W. Matthews, North Vernon
Johnson	Walter L. Portteus, Franklin
Kosciusko	E. W. Thomas, Warsaw
Lake	T. W. Oberlin, Hammond
	E. L. Schaible, Gary
Lawrence	Charles B. Emery, Bedford
Marion	E. O. Asher, New Augusta
	O. H. Bakemeier, Indianapolis
	Frank Gastineau, Indianapolis
	Walter F. Kelly, Indianapolis
	Ralph Lochry, Indianapolis
	C. H. McCaskey, Indianapolis
	H. G. Morgan, Indianapolis
	Walter Morton, Indianapolis
	L. L. Shuler, Indianapolis
	O. W. Sicks, Indianapolis
Marshall	T. C. Eley, Plymouth
Montgomery	T. Z. Ball, Crawfordsville
Morgan	H. H. Dutton, Martinsville
Noble	C. E. Munk, Kendallville
Orange	George Dillinger, French Lick
Parke-Vermillion	C. S. White, Rosedale
Porter	A. J. VanWinkle, Valparaiso
Putnam	G. D. Rhea, Greencastle
St. Joseph	Edward Blackburn, South Bend
	A. S. Giordano, South Bend
	M. D. Wygant, Mishawaka
Scott	Marvin L. McClain, Scottsburg
Spencer	Victor V. Schreifer, St. Meinrad
Sullivan	J. R. Crowder, Sullivan
Tippecanoe	Gordon A. Thomas, Lafayette
Vanderburgh	Minor Miller, Evansville
Wabash	James L. Walker, Lafontaine
Washington	Claude B. Paynter, Salem
Wells	Max M. Gitlin, Bluffton
Whitley	Paul A. Garber, South Whitley

Councilors

3rd District—H. C. Ragsdale, Bedford.
5th District—O. O. Alexander, Terre Haute.
6th District—Samuel Kennedy, Shelbyville.
7th District—C. J. Clark, Indianapolis.
8th District—M. A. Austin, Anderson.
9th District—F. T. Romberger, Lafayette.
10th District—N. K. Forster, Hammond.
11th District—Ira Perry, North Manchester.
12th District—A. J. Sparks, Fort Wayne.
13th District—W. B. Christophel, Mishawaka.

Past Presidents

William N. Wishard, Indianapolis.
William R. Davidson, Evansville.
E. M. Shanklin, Hammond.
C. N. Combs, Terre Haute.
Frank W. Cregor, Indianapolis.
George R. Daniels, Marion.
F. S. Crockett, Lafayette.
E. E. Padgett, Indianapolis.
R. L. Sensenich, South Bend.

Officers

E. D. Clark, Indianapolis, president.
Herman M. Baker, Evansville, president-elect.
A. F. Weyerbacher, Indianapolis, treasurer.
T. A. Hendricks, executive secretary.

THE CHAIRMAN: The By-Laws may be amended at any annual session by a majority vote of all delegates present at that session, after the amendment has laid on the table for one day. The House of Delegates may amend any article of the Constitution by a two-thirds vote of all delegates present at any annual session provided that such amendment shall have been presented in open meeting at the previous annual session and that it shall have been published twice during the year in THE JOURNAL of the Association. The House will recall that the Constitution of the State Association is in the process of being recodified. The Constitution will come up for final ratification at this meeting of the House of Delegates.

(At this time the House of Delegates paid a rising tribute to the memory of Dr. John C. Sexton of Rushville, president of the State Association in 1899, and Drs. C. L. Bock of Muncie, C. W. Haywood of Elkhart, and A. M. Hayden of Evansville, alternate delegates in 1936, all of whom had died since the last annual session.)

The minutes of last year's meetings were printed in the November 1936 issue of THE JOURNAL. Do I hear a motion that the reading of these minutes be dispensed with? (Motion that the reading of the minutes be dispensed with made by Dr. A. S. Giordano, seconded by Dr. Minor Miller, and carried.)

For the last four years the House has invited the delegates and alternates to the American Medical Association to sit in the House of Delegates, have the privilege of the floor, but have no power to vote. One of the changes in the new Constitution (Article V) which you will vote upon presently, provides for such a privilege for the A. M. A. delegates. (Dr.

Romberger moved that the delegates and alternates to the A. M. A. be invited to sit in the House of Delegates; motion seconded by Dr. E. E. Padgett, and carried.) They are duly invited. All members of the Association who desire to sit in on this meeting to hear the deliberations of the House are welcome.

In accordance with Chapter IX, Section 1, of the By-Laws of the Association, reference committees shall be appointed by the president immediately after the organization of the House of Delegates, these committees to serve during the session at which they are appointed. In order to expedite matters I have taken the liberty this year to name and notify these committeemen previous to the time the House convened. These reference committees should not be confused with the all-year round standing committees. To these committees shall be referred all reports, resolutions and measures presented to the House of Delegates at this session, except such matters as properly come before the Council, and the recommendations of these committees shall be submitted at the next meeting of the House of Delegates for acceptance in the original or modified form, or for rejection. The next meeting of the House of Delegates will be held Wednesday morning, promptly at 7 o'clock in the dining room of the French Lick Springs Hotel. This will be a breakfast meeting. Each committee consists of five members, the first member named to be chairman of the committee. As I read the names of the committee members, will you please stand and remain standing until your committee is completed in order that you may know each other? These committees should organize immediately after the adjournment of the House today and determine definite place and time of meeting, each committee chairman turning over to the Executive Secretary a note in writing stating the time and place his committee is to meet in order that this information may be placed on the bulletin board at the registration desk. This is very important.

Committee on Reports of Officers

Ira Perry, North Manchester, chairman (Wabash)
B. W. Egan, Logansport (Cass)
F. M. Gastineau, Indianapolis (Marion)
O. R. Spigler, Terre Haute (Vigo)
F. S. Crockett, Lafayette (Tippecanoe)

Sections and Section Work

Wm. C. Wright, Fort Wayne, Chairman (Allen)
A. M. Kirkpatrick, Columbus (Bartholomew)
V. L. Turley, Fowler (Benton)
C. G. Kern, Lebanon (Boone)
M. F. Boulden, Frankfort (Clinton)

Rules and Order of Business

A. C. Yoder, Goshen, chairman (Elkhart)
M. E. Klingler, Garrett (DeKalb)
H. C. Knapp, Huntingburg (Dubois)
J. Carl Freed, Attica (Fountain-Warren)
A. E. Stinson, Rochester (Fulton)

Medical Education and Hospitals

C. L. Botkin, Muncie, chairman (Delaware-Blackford)
Walter M. Stout, Newcastle (Henry)
P. H. Schoen, New Albany (Floyd)
Gordon A. Thomas, Lafayette (Tippecanoe)
R. L. Sensenich, South Bend (St. Joseph)

Public Policy and Legislation

J. E. Ferrell, Fortville, chairman (Hancock)
H. M. Rhorer, Kokomo (Howard)
H. P. Graessle, Seymour (Jackson)
Fred McK. Ruby, Union City (Randolph)
W. A. Thompson, Liberty (Wayne-Union)

Publicity

H. G. Morgan, Indianapolis, chairman (Marion)
S. D. Malouf, Peru (Miami)
T. C. Eley, Plymouth (Marshall)
M. D. Wygant, Mishawaka (St. Joseph)
J. H. Crowder, Sullivan (Sullivan)

Hygiene and Public Health

Minor Miller, Evansville, chairman (Vanderburgh)
Claude B. Paynter, Salem (Washington)
Max M. Gitlin, Bluffton (Wells)
C. E. Munk, Kendallville (Noble)
D. W. Matthews, North Vernon (Jennings)

Amendments to Constitution and By-Laws

O. O. Alexander, Terre Haute, chairman (Vigo)
E. O. Asher, New Augusta (Marion)
Walter L. Portteus, Franklin (Johnson)
Walter Morton, Indianapolis (Marion)
T. Z. Ball, Crawfordsville (Montgomery)

Credentials

T. W. Oberlin, Hammond, chairman (Lake)
E. L. Schaible, Gary (Lake)
C. V. Rozelle, Anderson (Madison)
O. W. Sicks, Indianapolis (Marion)
V. V. Schreifer, St. Meinrad (Spencer)

Miscellaneous Business

P. A. Garber, South Whitley, chairman (Whitley)
H. S. McKee, Greensburg (Decatur)
C. M. Donahue, Carmel (Hamilton)
W. E. Amy, Corydon (Harrison)

REPORTS OF OFFICERS

THE CHAIRMAN: The reports of officers except for the address from the chair and the address of the president-elect are printed in the September issue of THE JOURNAL and in the handbook of the House of Delegates, but each officer and committee chairman will be given five minutes to make any additions or explanation to the reports already published.

I shall have a few remarks to make in the morning before the general meeting and my address will be referred to the Reference Committee on Reports of Officers.

ADDRESS OF THE PRESIDENT-ELECT

DR. HERMAN M. BAKER: Mr. Chairman, and members of the House of Delegates: I find myself quite unable to express to you the depth of my appreciation of the honor which you have conferred upon me in designating me your President-elect, the most signal honor in your power to bestow.

I look back on the many years of service in this House and on the various committees of our State Association as among the happiest experiences of my professional career and I have derived a great deal of inspiration from your fellowship and your friendship. As I look back over these years, I see that the welfare and the health of the people whom we serve have ever been the dominant factors in your efforts to furnish to the people of Indiana the highest medical service obtainable.

With a sense of my own shortcomings, I accept this evidence of the confidence which you repose in me, with a full realization of the obligations and responsibilities entailed and at the same time with the firm determination so far as it lies within my power to walk faithfully in the footsteps of the distinguished men whom in the past you have so honored.

There is much confusion among us as to the potentiality of the future. Some are very optimistic, feeling that we are on the threshold of a new and better order. Many others are pessimistic, feeling that we are on the way to destruction of our freedom as a national group, as well as a professional group.

In an age of rapid change, there are things that we can all cling to in the light of our past and feel sure that we are on solid ground. As we read history, we are surprised that medicine as a profession and as a group survived. Organization, the orderly procedure of service for the public good, was part of the medical thought when the doctor emerged from his early pagan origin. Twenty-five hundred years before the Christian era there was a planned economy in the Mesopotamian basin and a code of medical practice was devised

All medical practice rests on three distinct fundamentals: research, discovery and distribution of knowledge. Research and discovery would be in vain if the mechanisms for the distribution of knowledge were not available. For this purpose there was founded the Royal Society of London in 1661, the French Academy in 1796, the Massachusetts Medical Society in 1781, and the Medical Society of the State of New York in 1806. Percival published his code of ethics in 1803, and in 1809 McDowell performed the first planned oophorectory in the backwoods of Kentucky. The convergence of common activities of the state societies brought about the formation of the American Medical Association in 1847, with its first national meeting in Baltimore in 1848, and the formation of our own Association in 1849.

Thus, organized medicine originally developed for the distribution of knowledge. With the increasing complexity of modern life, to this function has been added the function of serving and protecting the individual practitioner of medicine in his activities. The parent medical organization in this country, the American Medical Association, and the State Associations have taken over much of the work of buffering the individual physician against the storm of extraneous influences. It must be to such organizations as the county, state and national medical associations that we now look as we enter a period of new adjustments, marked by many modifications in old methods and by new interpretations. If we work these problems out in middle-of-the-road fashion, with mutual tolerance and respect, seeking ever to maintain a healthy balance, we shall be doing the job in conformity with democratic processes and principles; but if firebrands and fanatics to the left or reactionaries to the right insist upon complete and crushing victories, then we are preparing the ground for a crop of real trouble.

The one thing we must do in working out these new problems of the new era is to retain our constitutional processes and insist upon handling all problems through them. In other words, we must cling to our properly constituted organizations and not fall under the leadership of those individuals of minority groups who may be working outside the recognized processes and head us into dead-end roads. It is clear that we need calm judgment, tolerance and a sense of fair play on the part of all groups in working out a new scheme of things upon which we are definitely embarked, and we need leadership that has a deep respect for constitutional processes and an abiding faith in them. If we keep our feet on the ground there is no reason why we cannot create a greater democracy, a better and happier nation, and a better and happier medical group. We cannot keep our feet on the ground if fanatics from the left and from the right have their way and line us up into two camps, each thinking the other must be crushed.

Referred to Reference Committee on Reports of Officers.

Report of the Executive Secretary

Referred to Reference Committee on Reports of Officers.

Report of the Treasurer

Referred to Reference Committee on Reports of Officers.

Report of Chairman of the Council

Referred to Reference Committee on Reports of Officers.

REPORTS OF STANDING AND SPECIAL COMMITTEES

Committee on Credentials

Referred to Reference Committee on Credentials.

Executive Committee

Dr. C. A. Nafe: I would like to speak just a minute of the medical defense problems. As you will note, there have been a rather large number of malpractice suits filed. The Executive Committee feels that the physician who has had a malpractice suit filed against him should be very careful in selecting the attorney because in those regions where a physician was unfortunate enough to get a judgment against him we find many malpractice suits cropping up. It is noted on page 41 of the handbook that the Executive Committee recommends a change in the By-Laws as drawn up by the attorney of the Association. The American Bar Association has objected to the method by which our medical defense is furnished to physicians, saying that we are practicing law. However, after studying this question we find we are abiding by legal ethical standards. We, therefore, are not recommending any change in the By-Laws but prefer to have any information available and if the members of the Indiana Bar Association object to our plan we will confer further with them in order to work this out.

Referred to Reference Committee on Reports of Officers.

Committee on Arrangements

Referred to Reference Committee on Miscellaneous Business.

Committee on Scientific Work

Dr. Padgett: You know the duties of this committee are to provide the program for this meeting. I have never worked with a group of men who cooperated more thoroughly than did this committee, and the report of our work pretty well fills this little blue book, and I hope you will all attend. We think it is good.

Referred to Reference Committee on Sections and Section Work.

Committee on Public Policy and Legislation

Dr. Norman Beatty: In addition to the report published I would say that we have two big problems in the changes of medical practice—health cooperatives and Federal medical practice. The greatest thing that we can do to ward off these two movements is for each county medical society to make itself as complete a unit as possible, to maintain control over all its members as much as possible so that no member will be led astray by these movements. I want to take this opportunity to express the keen appreciation of myself and the members of the committee to every one of you, especially during the legislature, who spent much time and effort in helping us with our problems at that time.

Referred to Reference Committee on Public Policy and Legislation.

Bureau of Publicity

Referred to Reference Committee on Publicity.

Committee on Civic and Industrial Relations

Referred to Reference Committee on Public Policy and Legislation.

Committee on Medical Education and Hospitals

Referred to Reference Committee on Medical Education and Hospitals.

Committee on Public Relations

Referred to Reference Committee on Public Policy and Legislation.

JOURNAL Publication Committee

Dr. E. M. Shanklin: In addition to the report published on page 78, I have a very short supplemental report which I would like to read:

During the five years that THE JOURNAL has been under the direct supervision of the Indiana State Medical Association, numerous changes have occurred. When the JOURNAL was taken to Indianapolis in December of 1932, we were in the midst of the depression, advertising revenue was at low ebb, and it was difficult to arrange a satisfactory magazine with the money available. However, a creditable magazine was published. In that five years, the advertising revenue has increased from a low of approximately $6,500 to nearly $10,000 in 1936, and your JOURNAL has been improved by the addition of extra reading pages, numerous illustrations, a suitable cover and, occasionally, the use of color. Your magazine reaches you flat, mailed in an envelope which keeps it clean and in good condition. There has been an increase of 12.5 per cent in the number of magazines mailed each month. And a respectable balance has been kept on hand to provide for special issues and the little extras that make any magazine more attractive to the reader. In that first year, 1933, there were 634 reading pages; in 1936 there were 680 reading pages, and as our budget permits, these will be increased.

In this five-year period, numerous comments have come to me in regard to THE JOURNAL. Occasionally they have criticized but more often they have commended our policies and choice of material. From outside of the state, even from officials of the American Medical Association, have come

unsolicited letters of praise for THE JOURNAL which have encouraged us to work the harder for the betterment of the magazine. Only this last week a professor of medicine in a Chicago medical college said that, in his opinion, our Indiana JOURNAL is the best state medical journal published, and his words were not directed to us, but came through an unrelated source, lending sincerity to the remark.

It is my candid opinion that the increased attractiveness and worthwhileness of THE JOURNAL have had no little part in increasing the Association's membership during the past two years.

Some of you probably think that the editor has little to do except to sit down and dash off a few editorials and editorial notes each month. If only this were true, your editor would have little to bother him. Actually, there are innumerable duties which are not apparent and which never are publicly discussed. He must scout around for good material for publication; he must be cautious in his solicitations, and he must be tactful in disposing of material that does not deserve publication. He must read or scan some fifty medical journals each month. He must studiously maintain a knowledge of current events in the medical world and avoid biased opinions. These are only a few of the things that your editor must do.

After five years of working under the present arrangement, I am more than ever convinced that the creation of the editorial board was a procedure whose value was unrealized at the time; the wisdom of that act can no longer be questioned, for it has been proved beyond doubt. THE JOURNAL has the benefit of the advice and opinions of a staff of eight at all times, and additional assistance when requested from officers and committees who have been unfailingly cooperative. It is the concerted effort of this whole staff, and decidedly not the genius of any one individual, that has made our JOURNAL the representative medical journal that it is now.

Referred to Reference Committee on Reports of Officers.

Committee on Necrology

Referred to Reference Committee on Miscellaneous Business.

Committee on Graduate Education

Referred to Reference Committee on Medical Education and Hospitals.

Committee on Study of Health Insurance

Referred to Reference Committee on Public Policy and Legislation.

Committee on Veterans' Affairs

Referred to Reference Committee on Public Policy and Legislation.

Committee on Study of High School Athletics

Referred to Reference Committee on Hygiene and Public Health.

Committee on State Fair

Referred to Reference Committee on Publicity.

Committee on Mental Health

DR. LARUE D. CARTER: This Committee on Mental Health has had a number of meetings during the past year and our report is in the September issue of THE JOURNAL. We have one or two problems of considerable importance: first, the effort on the part of the laity to establish psychological clinics which are not under control of the medical profession. We object to this seriously. The two things we have held out for these clinics are that they must be under the control of the medical profession and they must be established for indigents only. Another thing which has been mentioned in this report for the last two or three years and on which it seems that our committee on hospitalization might take some action is the fact that in the great majority of counties in Indiana, except perhaps Marion, Vigo and Vanderburgh, there is absolutely no provision to take care of acute mental cases pending their commitment to the state institutions. It seems there is no reason why county and private hospitals should not provide for these cases. It would be a source of revenue for them and would provide for these unfortunate people.

Referred to Reference Committee on Hygiene and Public Health.

Committee on Prevention of Traffic Accidents

DR. MURRAY N. HADLEY: It is apparent that this problem of traffic hazards is far from solved. There is great divergence of opinion as to what should be done. There is unanimity of opinion that something should be done. Most of the facts point to excessive speed as the cause of accident. A bill has been introduced in Congress prohibiting manufacturers to make cars that go more than fifty miles per hour. It is the opinion of the majority of the committee that we should support the bill at this time.

Referred to Reference Committee on Hygiene and Public Health.

State Board of Health Liaison Committee to Deal with Social Security Act, and Sub-Committee to Study Maternal Morbidity and Mortality Rates for Indiana

DR. E. O. ASHER: After the report which is found in the handbook was made, there was finally completed, after about five years' deliberation, a proposition whereby the committee could more definitely study the infant deaths and puerperal mortality in the state. The committee has formulated a system of questionnaires whereby that information can be gotten for the committee for the study of puerperal and infant mortality, and that is the addition to our report. (Dr. Asher turned over the written report of his committee on this subject, which was printed in the October JOURNAL, and some correspondence to the chair to be referred to the proper reference committee.)

Referred to Reference Committee on Public Policy and Legislation.

Committee on Old Age Dependency

Referred to Reference Committee on Miscellaneous Business.

Committee on Secretaries' Conference

Referred to Reference Committee on Miscellaneous Business.

Committee on Syphilis Control

DR. F. R. NICHOLAS CARTER: The first of September our committee attempted to make a survey of the laboratory facilities of the state of Indiana. We therefore addressed to the secretary of each county medical society a questionnaire which contained four questions:

(1) Do you have a pathological laboratory in your county?

Seventy-two of the ninety-two counties have no laboratory facilities for blood tests.

(2) Do you have facilities for the doing of darkfield examinations?

Again seventy-two of the ninety-two counties have no facilities for this work. However, these were not the same counties as mentioned before.

(3) What type of blood test is desired by your county?

In all we had a report of seven different types of blood tests. Some do three or four and some do only one.

(4) What is the ordinary fee charged for blood examinations?

The question was answered from $1.00 to $10.00.

The Committee on Syphilis Control realizes that the problem is a large one. We therefore have enumerated several points for your discussion when the time comes.

Referred to the Reference Committee on Hygiene and Public Health.

Auditing Committee

Referred to the Council.

Historian

No report.

Report of the Statistician

Referred to Reference Committee on Reports of Officers.

Report of the Liaison Committee, Indiana State Medical Association, and Services for Crippled Children of the State Department of Public Welfare

DR. R. L. SENSENICH: This report was not available in time for the booklet because the Liaison Committee of the Indiana State Medical Association with the Indiana Crippled Children's Bureau was officially appointed only a few weeks ago. This is the same committee which has been acting as the technical advisory committee to that Bureau for some time:

With a Federal annual allotment of $55,313.54 the State Department of Public Welfare is directed to inaugurate a

supplementary program of services for crippled children that will extend and improve services for crippled children, particularly in areas which are predominantly rural and those suffering from severe economic distress.

The State Department proposes to extend such services by eventually expanding the program to develop certain types of service that heretofore have not been emphasized. These phases are:

(1) Case finding;
(2) Extension of hospital facilities;
(3) Facilities for diagnosis;
(4) Follow-up services;
(5) Prevention of crippling.

The problem of *case finding* is being developed by a subcommittee of the General Advisory Committee on Services for Crippled Children. Since the annual allotment of federal funds is based on the number of crippled children in the state it is important that the State Department may supply accurate information to the Children's Bureau of the Department of Labor concerning the number of crippled children in the state. The reporting of congenital deformities as provided by the Acts of 1937 will be another phase of case finding that will primarily concern physicians.

In providing for *facilities for diagnosis* the state Department of Public Welfare has worked closely with a technical sub-committee of the General Advisory Committee for Services for Crippled Children. The committee is composed of:

Dr. R. L. Sensenich, South Bend
Dr. I. C. Barclay, Evansville
Dr. F. S. Crockett, Lafayette
Dr. C. J. Clark, Indianapolis
Dr. John H. Green, North Vernon
Dr. Leonard A. Ensminger, Indianapolis
Dr. Louis D. Belden, Indianapolis

This committee has also been duly appointed by the president upon the suggestion of the Executive Committee of the Indiana State Medical Association to act as a liaison committee between the State Department of Public Welfare and the State Medical Association. Its purpose is to make recommendations to the State Department of Public Welfare concerning the development of the state plan for services for crippled children.

To date, this committee has assisted the State Department of Public Welfare in the selection of fourteen doctors who will conduct orthopedic consultation services in the various councilor districts of the state. Consultation services will be held in each councilor district about two times yearly, and any physician may have the privilege of recommending to a county department of public welfare that a crippled child be seen by an orthopedic consultant at such service for diagnosis and recommendations as to treatment. Although this service has not been established as yet, it is understood that it will soon function.

Your committee has recommended fees to be paid for this consultation service, and has also recommended that when any physician licensed to practice medicine in this state receives authorization by a county department of public welfare to examine a child who has applied for services, the maximum fee for such examination shall be three dollars ($3.00.)

The orthopedic consultation services referred to above will also serve to render follow-up service in the manner of muscle testing, other examination, and recommendations concerning children who have previously received services at an approved hospital center.

This service will be augmented by a staff of four orthopedic field nurses who will contact all cases returned from hospitals and will assist in arranging for nursing care in the child's home.

The problem of extension of hospital service has been carefully considered and the liaison committee has recommended that, in addition to the use of the James Whitcomb Riley Hospital for Children, the St. Joseph's and Epworth Hospitals as well as the Children's Dispensary of South Bend be approved by the State Department and utilized in an extension of hospital facilities. This means that children from the northern section of the state will be placed in these hospitals by the State Department of Public Welfare after application for services has been made and approved by the county departments of public welfare.

The corrective work at the South Bend hospital center will be done or supervised by Drs. Robert Acker and Walter Baker. These men were selected and approved by the State Department on the recommendation of this committee, and their nominal monthly remuneration was also a recommendation of this committee.

The plan as developed by the State Department provides for a special project housed in the James Whitcomb Riley Hospital for Children. This project is solely for the treatment of children afflicted with cerebral palsy. The staff consists of a physical therapist, an occupational therapist, and a speech pathologist, all of whom are paid from federal funds. The project is now in operation for the needy child, and as soon as adequate housing facilities can be arranged this project will be made available to the children of parents who can afford to pay housing costs and all other costs incident to this treatment. It should be understood that the children of parents who can afford to pay will not be accepted in this project for treatment except on the recommendation of the physician who is caring for the child.

Prevention of crippling. This phase of the program will consist in the dissemination of information which will be of assistance in the proper management of diseases which result in crippling.

Bearing in mind that the greater part of the $55,000 granted by the Federal Government in conformance with the state plan has been earmarked by the state to be used in reimbursing counties in a percentage of the costs of hospitalization, purchase of appliances, and treatment of cerebral palsy, it is obvious that at present there will not be a large amount of money available from State and Federal funds for the payment of medical fees. Consideration must be given to this question to the end that proper provision be made for financing medical services as the work develops.

Dr. Oliver W. Greer, director of Services for Crippled Children, has been a practicing physician for twelve years and is a member of the Indiana State Medical Association. He sought advice and counsel at the outset from ethical members of the profession, and has never hesitated to bring problems to members of the technical committee in order that fundamental steps taken shall not be inconsistent with medical standards. The committee commends Dr. Greer for the progress made, despite the many difficulties encountered in the organization of a new activity, within the restrictions imposed by the Children's Bureau of the United States Department of Labor, and the limited funds available.

I. C. BARCLAY, Evansville
F. S. CROCKETT, Lafayette
C. J. CLARK, Indianapolis
JOHN H. GREEN, North Vernon
LEONARD A. ENSMINGER, Indianapolis
LOUIS D. BELDEN, Indianapolis
R. L. SENSENICH, South Bend, chairman.

Referred to Reference Committee on Public Policy and Legislation.

Committee on Scientific Exhibit

Referred to Reference Committee on Sections and Section Work.

Report of Delegates to the A. M. A.

Referred to Reference Committee on Reports of Officers.

UNFINISHED BUSINESS

THE CHAIRMAN: Now we have the recodification of the Constitution and By-Laws.

At the French Lick session, 1933, Dr. Joseph Weinstein, president of the Association, suggested the codification of the Constitution and By-Laws. He said:

"I would like to make a suggestion to the House, and that is the real necessity of the codification of the Constitution and By-Laws. We have gone on for a

number of years with a number of new resolutions and by-laws being passed. There are some mix-ups, some discrepancies. It just appeals to me as for the benefit of our secretary, for the benefit of our committees, and for the benefit of our incoming officers that it really is a necessity, and I would like to have a motion that we have the Constitution and By-Laws codified and printed."

Motion that this be done made by Dr. Shanklin and seconded by Dr. Kelly and carried unanimously.

Codification committee appointed composed of W. N. Wishard, chairman; J. H. Weinstein, A. W. Cavins; Albert Stump and T. A. Hendricks, ex-officio members. Report of this committee published in the September 1934 issue of THE JOURNAL, referred to Reference Committee on Constitution and By-Laws at the first meeting of the House of Delegates, October 9, 1934.

Committee report approved with corrections by reference committee, and it came before the House for final discussion in the 1935 session at Gary. The By-Laws as recodified were adopted in the 1934 session but a new committee was ordered by the House to be appointed to bring in a report upon the Recodification of the Articles of the Constitution. Your president, Dr. R. L. Sensenich, appointed the following committee:

G. A. Thomas, M. D., chairman
O. R. Spigler, M. D.
J. T. Oliphant, M. D.

The report of this committee was accepted by the House at the South Bend session. The new Constitution is now up for final ratification by the House, having, according to the provisions of the Constitution, lain over a year and having been published twice during the year in THE JOURNAL—in the January and September issues of THE JOURNAL.

If there are no questions or discussions, the matter is ready for the vote of the House. What is your pleasure?

DR. ROMBERGER: I move that the Constitution as published in the last number of THE JOURNAL be adopted as the Constitution of the Indiana State Medical Association. (Motion seconded by Dr. Padgett, and carried.)

NEW BUSINESS

DR. E. L. SCHAIBLE: I would like to offer a resolution that there be a section added to this body to be called the Section on Obstetrics and Gynecology. (This resolution was referred to the Reference Committee on Sections and Section Work.)

DR. H. G. MORGAN: As chairman of the delegates of the Marion County Medical Society I wish to offer these two resolutions:

(1) "BE IT RESOLVED that a Committee on Cancer be appointed to cooperate with the American Society for the Control of Cancer, in its activities in Indiana. The function of this Committee shall be to study and investigate the problem in general and to coordinate and direct the activities of the Women's Field Army of the American Society for the Control of Cancer, as it functions in this State."

(Referred to the Reference Committee on Hygiene and Public Health.)

(2) "WHEREAS, at the present time there are many health cooperatives being formed in various parts of the country; these cooperatives agree to furnish full medical care to their members for a stated weekly or monthly fee; this kind of medical care is strongly disapproved by organized medicine; and

"WHEREAS, there have been rumors of the formation of health cooperatives in Indiana;

"BE IT RESOLVED that the House of Delegates of the Indiana State Medical Association go on record as disapproving this type of medical care.

"FURTHER BE IT RESOLVED that each county medical society be urged to do everything in its power to prevent its members from taking part in any plans which offer to the public medical care of this kind."

(Referred to Reference Committee on Public Policy and Legislation.)

DR. H. C. RAGSDALE introduced the following resolution:

"WHEREAS the Federal Social Security Act has been declared valid, and

"WHEREAS new social legislation affecting the practice of medicine is bound to be enacted, and

"WHEREAS the trend of this legislation will depend in a great measure on the attitude and cooperation of the medical profession, and

"WHEREAS no state association has gone on record favoring health insurance and socialized medicine, and

"WHEREAS countless people in the low wage scale and middle class will receive free and state municipal attention, depriving the medical profession of just revenue;

"BE IT RESOLVED that the Indiana State Medical Association declare itself in favor of the principles of social legislation, especially as concerns the indigent, aged, disabled, and low wage group. Further, that the Indiana State Medical Association urge that the following principles be embodied in such health measures

"First: That we indicate a desire to cooperate with the Federal Government in such social services in that we may direct the government as to the proper application of this service, thus leaving control vested in the medical profession and not permitting it to be subjected to political manipulation.

"Second: And that the patient at all times have free choice of his physician."

(Referred to Reference Committee on Public Policy and Legislation.)

DR. A. M. KIRKPATRICK presented the following resolution:

"WHEREAS there exists in our State various cults and cultists, irregular practitioners and others, both organizations and individuals, whose activities under the guise of medical practice are detrimental to public health and public welfare, and

"WHEREAS the public looks to the ethical and organized medical profession for the maintenance of standards of medical care adequate to public health and public welfare, and for the protection of the public from unscrupulous practices in the healing art,

"THEREFORE BE IT RESOLVED that the Indiana State Medical Association call upon its proper authority for the appointment of a committee from its members to investigate these conditions in our State, to investigate and study how other state medical societies are meeting this problem, and to formulate a program for proper action; said committee to make progress reports to the regular sessions of the executive committee, and a full report at the next annual convention of this Association."

(Referred to Reference Committee on Public Policy and Legislation.)

DR. W. C. WRIGHT: I would like to introduce a resolution to the effect that the dues for admission to membership in the Indiana State Medical Association after July first of any year shall be prorated.

(Referred to Reference Committee on Miscellaneous Business.)

DR. F. T. ROMBERGER offered the following amendments to the Constitution and By-Laws:

Amendments to the Constitution:

"Article IX, Section 1—The officers of this Association shall be a President, a President-elect, a *first Vice-President, a second Vice-President,* an Executive Secretary, etc.

"Article IX, Section 2—*The Vice-Presidents shall not be eligible as candidates for the office of President-elect during the year of their service.*"

Amendments to the By-Laws:

"Chapter VI, Section 2—*The Vice-Presidents shall assist the President and serve his unexpired term in the order of election in the event of the President's death, resignation, or removal.*

"Chapter IX, Section 1—Immediately after the organization of the House of Delegates at each Annual Session, the President shall appoint from the members of the House, reference committees to serve during the session at which they are appointed. *Selection of these reference committees shall be*

made by the President and his advisors at a time sufficiently in advance of the Annual Meeting, so that the roster of the committees may be published in THE JOURNAL *and/or Hand Book prior to said Annual Meeting. Such publication shall constitute notification of appointment of the various delegates to their respective committees. Absenteeism shall be reported immediately to the President, who then will substitute from among those present.*

(Referred to Reference Committee on Amendments to Constitution and By-Laws.)

DR. F. S. CROCKETT: Last evening I appeared before the Executive Committee with the suggestion of Dean C. B. Jordan of Purdue University that an inter-allied professional association be formed in Indiana. It seems that in Iowa, North Dakota, and possibly California, there has been an alliance between the pharmaceutical, state dental and medical societies. It appealed to Dean Jordan that such an alliance might hold some real benefit. I therefore move that the House of Delegates of the Indiana State Medical Association instruct the Council of the Association to appoint a committee of three to study and report in six months, the proposal to join with other allied professional groups of the State for a more satisfactory solution of their mutual problems, and authorize the Council to take such further action as is needed to secure the fullest possible benefits from such association.

(Referred to Reference Committee on Public Policy and Legislation.)

DR. SENSENICH: The American Medical Association, pursuant to a national demand, is creating a Council on Occupational Diseases. It has named men, outstanding in research, and this Council on Occupational Diseases will soon come into being with the idea of giving some advice as to what can be termed an occupational disease. Some thirty-one items are recognized by the state law of Michigan as being occupational diseases. It is my thought that the Indiana State Medical Association should either instruct some existing committee or create some new committee which will give study to occupational diseases in Indiana, especially since the last legislature enacted a law which applies to this subject. It would seem that the physicians in Indiana should know what these diseases are and they should be permitted to confer with advisory groups. I make a motion to the effect that the Indiana State Medical Association create a committee or authorize some already existing committee to study occupational diseases. It would seem to me that this committee should be called the Committee on Occupational Diseases.

(Motion seconded by Dr. W. F. Kelly, and carried.)

Upon the motion of Dr. Romberger, duly seconded, the first meeting of the House of Delegates adjourned to Wednesday morning, October 6, at seven o'clock.

HOUSE OF DELEGATES — Second Meeting

The second meeting of the House of Delegates, a breakfast meeting, was held in the west dining room of the French Lick Springs Hotel on Wednesday, October 6, 1937, with the president, Dr. E. D. Clark, in the chair. The meeting was called to order at 8:15 a. m.

On motion of Dr. Paul A. Garber, duly seconded and carried, roll call was dispensed with. The attendance slips showed the following present:

County	*Delegates*
Allen	M. B. Catlett, Fort Wayne
	M. R. Lohman, Fort Wayne
	William C. Wright, Fort Wayne
Bartholomew	A. M. Kirkpatrick, Columbus
Cass	B. W. Egan, Logansport
Clay	J. F. Maurer, Brazil
Clinton	M. F. Boulden, Frankfort
Daviess-Martin	S. L. McPherson, Washington
Dearborn-Ohio	Omer H. Stewart, Aurora
Decatur	H. S. McKee, Greensburg
DeKalb	M. E. Klingler, Garrett
Dubois	H. C. Knapp, Huntingburg
Elkhart	A. C. Yoder, Goshen
Fayette-Franklin	R. S. Sappenfield, Brookville
Floyd	P. H. Schoen, New Albany
Fountain-Warren	J. Carl Freed, Attica
Fulton	A. E. Stinson, Rochester
	Dean K. Stinson, Rochester, alternate
Gibson	C. M. Clark, Oakland City
Grant	R. W. Lavengood, Marion
Hamilton	C. M. Donahue, Carmel
Hancock	J. E. Ferrell, Fortville
Harrison	William E. Amy, Corydon
Henry	Walter M. Stout, Newcastle
Howard	H. M. Rhorer, Kokomo
Huntington	R. G. Johnston, Huntington
Jackson	H. P. Graessle, Seymour
Jasper-Newton	A. R. Kresler, Rensselaer
Jefferson	S. A. Whitsitt, Madison
Johnson	Walter L. Portteus, Franklin
Kosciusko	E. W. Thomas, Warsaw
Lake	W. H. Howard, Hammond
	F. A. Malmstone, Griffith
	T. W. Oberlin, Hammond
	E. L. Schaible, Gary
Lawrence	Charles B. Emery, Bedford
Madison	C. V. Rozelle, Anderson
Marion	E. O. Asher, New Augusta
	O. H. Bakemeier, Indianapolis
	Norman Beatty, Indianapolis
	Frank M. Gastineau, Indianapolis
	W. F. Kelly, Indianapolis
	Ralph L. Lochry, Indianapolis
	C. H. McCaskey, Indianapolis
	H. G. Morgan, Indianapolis
	W. P. Morton, Indianapolis
	L. L. Shuler, Indianapolis
	O. W. Sicks, Indianapolis
Marshall	T. C. Eley, Plymouth
Miami	S. D. Malouf, Peru
Montgomery	T. Z. Ball, Crawfordsville
Noble	C. E. Munk, Kendallville
Orange	George Dillinger, French Lick
Parke-Vermillion	C. S. White, Rosedale
Pike	T. R. Rice, Petersburg
Porter	A. J. Van Winkle, Valparaiso
Putnam	G. D. Rhea, Greencastle
Randolph	Fred McK. Ruby, Union City
St. Joseph	Edward Blackburn, South Bend
	A. S. Giordano, South Bend
	M. D. Wygant, Mishawaka
Scott	M. L. McClain, Scottsburg
Shelby	B. G. Keeney, Shelbyville
Sullivan	J. R. Crowder, Sullivan
Tippecanoe	R. R. Calvert, Lafayette
	Gordon A. Thomas, Lafayette
Tipton	H. B. Shoup, Sharpsville
Vanderburgh	Minor Miller, Evansville
Vigo	Ernest O. Nay, Terre Haute
	O. R. Spigler, Terre Haute
Wabash	James L. Walker, Lafontaine
Washington	Claude B. Paynter, Salem
Wayne-Union	W. A. Thompson, Liberty
Wells	Max M. Gitlin, Bluffton
	Allen C. Nickel, Bluffton, alternate
Whitley	Paul A. Garber, South Whitley

Councilors

1st District—I. C. Barclay, Evansville
2nd District—H. C. Wadsworth, Washington
3rd District—H. C. Ragsdale, Bedford
4th District—M. C. McKain, Columbus
6th District—Samuel Kennedy, Shelbyville
7th District—C. J. Clark, Indianapolis
8th District—M. A. Austin, Anderson
9th District—Floyd T. Romberger, Lafayette
10th District—N. K. Forster, Hammond
11th District—Ira E. Perry, North Manchester
12th District—A. Jerome Sparks, Fort Wayne
13th District—W. B. Christophel, Mishawaka

Past Presidents

William N. Wishard, Indianapolis
W. H. Stemm, North Vernon
W. R. Davidson, Evansville
E. M. Shanklin, Hammond
Charles N. Combs, Terre Haute
F. W. Cregor, Indianapolis
George R. Daniels, Marion
A. B. Graham, Indianapolis
E. E. Padgett, Indianapolis
R. L. Sensenich, South Bend

Officers

E. D. Clark, Indianapolis, president
Herman M. Baker, Evansville, president-elect
A. F. Weyerbacher, Indianapolis, treasurer
T. A. Hendricks, executive secretary
D. F. Cameron, Fort Wayne, delegate to the A. M. A.
H. G. Hamer, Indianapolis, delegate to the A. M. A.

Dr. W. F. Carver, chairman of the Committee on Credentials, announced that there were one hundred present and that all duly elected delegates, councilors, and past presidents were entitled to vote.

THE CHAIRMAN: The first order of business is the election of officers. We will now have nominations for president-elect.

ELECTION OF OFFICERS

President-elect:

Dr. M. R. Lohman nominated Dr. E. M. VanBuskirk of Fort Wayne. Nomination seconded by Dr. M. B. Catlett.

Dr. W. H. Stemm nominated Dr. E. E. Holland of Richmond.

Dr. Samuel Kennedy read the following resolution which had been passed by the Sixth District Medical Society:

"That the Sixth Councilor District Medical Society of Indiana at its annual meeting, held at Greenfield, Indiana, on the 20th day of May, 1937, unanimously indorses the action taken by the Wayne-Union County Medical Society in its regular meeting April 29, 1937, in presenting the name of Dr. E. E. Holland of the Wayne-Union Society to the House of Delegates of the Indiana State Medical Association, as a candidate for president-elect, at its annual meeting at French Lick October 4, 5 and 6."

Dr. W. A. Thompson spoke in support of Dr. Holland's election.

Dr. George R. Daniels moved that the nominations be closed. Motion seconded, and carried.

The chairman appointed Dr. C. V. Rozelle and Dr. Walter M. Stout tellers.

On balloting, Dr. E. M. VanBuskirk was elected president-elect for 1938.

Dr. Thompson moved that the election be made unanimous; motion seconded by Dr. P. H. Schoen, and carried.

The chair named Dr. A. J. Sparks, Dr. Lohman, Dr. Catlett, and Dr. William C. Wright to notify Dr. VanBuskirk of his election and to escort him into the House of Delegates' meeting.

Treasurer:

Dr. C. J. Clark nominated Dr. A. F. Weyerbacher to succeed himself. Nomination seconded by Dr. N. K. Forster. Motion made by Dr. F. T. Romberger that the nominations be closed and that the secretary east the unanimous vote of the House for Dr. Weyerbaeher for treasurer; motion seconded and carried, and ballot cast by the executive secretary.

THE CHAIRMAN: We will now have a few words from the president-elect, Dr. VanBuskirk.

DR. E. M. VANBUSKIRK: Gentlemen: Words eannot express my appreciation for giving me this high honor. I will try to carry on as successfully as my predecessors. I don't know whether I deserve this honor, but I like it, and I thank you and I will do my best.

Delegates to the American Medical Association

THE CHAIRMAN: Next is election of delegates to the A. M. A. You should keep in mind that delegates must have been fellows in the A. M. A. for the preceding two years. Our holdover delegates are H. G. Hamer of Indianapolis, and R. L. Sensenich of South Bend, and the holdover alternates are W. F. Kelly of Indianapolis and E. M. Shanklin of Hammond.

DR. R. L. SENSENICH: Owing to my election to the office of trustee of the Ameriean Medical Association, I desire to resign as delegate to the American Medical Association. I submit my resignation at this time in order that my successor may have an opportunity to familiarize himself with the problems likely to come before that body and be able better to represent the Indiana State Medical Association in the coming session of the House of Delegates in San Francisco.

It has been my honor and privilege to represent you for more than seven years and I wish to express my appreciation of the confidence you have placed in me and for the help you have given me through the years of my service.

THE CHAIRMAN: I am going to declare Dr. Shanklin as delegate to succeed Dr. Sensenich.

Dr. H. C. Wadsworth nominated Dr. George Dillinger of French Lick as alternate to Dr. Shanklin. Dr. W. B. Christophel nominated Dr. A. S. Giordano of South Bend for this position. Dr. Paul A. Garber made the motion that the nominations be closed; motion seconded, and carried. Dr. Dillinger was elected alternate delegate to Dr. Shanklin by ballot vote.

THE CHAIRMAN: The next order of business is the election of delegates to succeed Don F. Cameron of Fort Wayne and F. S. Crockett of Lafayette.

The House unanimously re-elected Dr. Cameron and Dr. Crockett delegates to the Ameriean Medical Association for the ensuing two years.

THE CHAIRMAN: The next order of business is the nomination of candidates to succeed George Dillinger and A. M. Mitchell of Terre Haute, as alternates.

Dr. H. G. Morgan nominated Dr. Norman Beatty; nomination seconded by Dr. F. W. Cregor.

Dr. C. N. Combs nominated Dr. Mitchell to succeed himself.

Dr. Forster moved that the nominations be closed and that the secretary cast the unanimous ballot of the House for Dr. Beatty and Dr. Mitchell for alternate delegates to the American Medical Association for the ensuing two years. Motion seconded by Dr. Romberger and carried. Ballot cast by the executive secretary.

Selection of City for 1938 Meeting

Dr. Morgan on behalf of the Indianapolis Medical Society and the officials of Indianapolis extended the Association an invitation to hold its next annual session in Indianapolis.

On the motion of Dr. Claude B. Paynter, seconded unanimously, the invitation to meet in Indianapolis in 1938 was accepted by the House of Delegates.

ELECTION OF COUNCILORS

Reports were made concerning the election of councilors for the following districts:

Third District—Dr. Schoen reported that the Third District Medical Society at its spring meeting had elected Dr. William H. Garner of New Albany to succeed Dr. H. C. Ragsdale of Bedford whose term expires December 31, 1937.

Sixth District—Dr. J. E. Ferrell reported that Dr. Samuel Kennedy was re-elected councilor of the Sixth District at the district meeting in May.

Ninth District—Dr. Crockett reported the re-election of Dr. F. T. Romberger as councilor of the Ninth District.

Twelfth District—Dr. C. E. Munk reported that the Twelfth District will hold a meeting in November, at which time the councilor will be elected to sueceed Dr. A. J. Sparks.

REPORTS OF REFERENCE COMMITTEES
Reports of Officers

House of Delegates,
Indiana State Medical Association.

President's Address:

Your committee wishes to commend the address by our president for its masterful summation of the problems involving the future of the profession as well as those having to do with medical education.

The officers of the Association have diligently performed their many arduous and exacting duties at great sacrifice of time and energy. It is difficult for anyone lacking this experience to appreciate the extent to which the multitudinous interests of our group are served and preserved by their unselfish efforts.

The accomplishments of the past year as enumerated by our president are of vital concern to the future and welfare of our profession. Of these accomplishments, not least is the side encouraging better facilities and higher standards of graduate and post-graduate instruction as well as to increase public interest and appreciation in these efforts. The efforts to encourage better scientific programs in county and district meetings together with the annual post-graduate course given this year in conjunction with our State Medical School are well designed to keep alive an ever-increasing interest in newer advances of medical science.

A deserving tribute is paid to those members of our profession who contributed so largely and efficiently to the preservation of public health among the victims of the recent flood in southern Indiana—a record reflecting great credit upon the profession as a whole.

Your committee has given careful thought to our president's remarks concerning the Indiana University School of Medicine. It would appear that a useful service might be rendered medical education in this state by a study, conducted under proper auspices, of the questions raised in this address. It is therefore recommended by your reference committee that the president be instructed to appoint a committee whose duty it shall be to make a factual finding covering the points enumerated in this address and to report to this House at its next annual meeting.

It is the opinion of your committee that in the training of public health nurses much of value would be gained if instruction be given by physicians familiar with the subject rather than by social service workers lacking the necessary medical education. We recommend that this be brought to the attention of those responsible for this instruction.

Your committee has noted with interest the statement that the professional staffs of our hospitals for the mentally ill are not provided with an adequate number of physicians to provide an approved standard of care. Careful inquiry however reveals that the large number of custodial cases resident in these institutions does not call for the number of additional doctors suggested in the Bullis report. However some addition to the professional staffs of some institutions is needed and this need should be supported by the profession. It is recommended that this House approve all such efforts to maintain a high standard of professional care for these unfortunate individuals.

(On motion of Dr. Perry, duly seconded, this report was adopted.)

Address of President-elect:

Your committee wishes to congratulate our president-elect for the wholesome advice given the medical profession in this crucial period we are now entering. We feel he has a firm grasp of the situation and agree with him that now as never before "we need calm judgment, tolerance, and a sense of fair play on the part of all groups in working out a new scheme of things upon which we are definitely embarked, and we need leadership that has a deep respect for constitutional processes and an abiding faith in them."

(Dr. Perry moved that this reported be adopted; motion seconded by Dr. James L. Walker, and carried.)

Report of the Executive Secretary:

In reviewing this report your committee is impressed with the marked change in the conduct and organization of the Association since the office of executive secretary was created and the present incumbent has filled the post. This result comes as a tribute to the vision of those leaders of the profession whose efforts created the foundation for this improved structure of medical organization. In contrast we have only to visualize the effectiveness of our efforts in combating movements hostile to the best interests of a high standard of medical practice had we failed to perfect our organization. Having perfected our executive office we must constantly seek to strengthen our position by enlisting the enlightened and enthusiastic support of all ethical members of the profession. The goal of three thousand members is the logical conclusion if we are to grow in strength and influence.

(Dr. Perry moved the adoption of this report; motion seconded by Dr. J. E. Ferrell, and carried.)

Report of the Treasurer:

We note with pleasure the healthy condition of the treasury of our Association as reported by our treasurer. We recommend the adoption of this report.

(Dr. Perry's motion was seconded by Dr. Sensenich, and carried.)

Report of Chairman of the Council:

We also note with pleasure the report of the chairman of the Council with reference to the work of the Council during the past year. We likewise recommend its adoption.

(Motion seconded by Dr. Shanklin and report adopted.)

Report of the Executive Committee:

We, the committee to which has been referred the report of the Executive Committee, wish to commend the personnel of said committee in their untiring efforts to do the work assigned them, as in their report hardly a day has passed that some member has not been in contact with headquarters. As you know, the entire work of this Association is in their hands when the Council is not in session. We wish first to commend them for their work—

1. Battle against socialized medicine.
2. Their stand on tuberculosis clinics.
3. Their stand on health cooperatives.
4. Their work against group hospitalization.
5. Public nurse attitude.
6. Their report of the recent flood, with their commendation of physicians in southern Indiana and their attitude toward the Red Cross.
7. Their report on our Journal, whose business management is in their hands.
8. We especially commend the concluding recommendations, especially No. 7, which condemns the formation of medical societies other than the county and district societies which form an integral part of the State Association, knowing full well that a multiplicity of societies must detract from county and district societies.

We move the adoption of this report.

(Motion seconded by Dr. W. F. Kelly, and carried.)

Report of JOURNAL Publication Committee:

The Journal under its present direction has continued to serve all the profession of the state in a satisfactory manner. Subscriptions to THE JOURNAL have been offered at $1.00 per year to junior and senior medical students in the Indiana University School of Medicine and continued through interne years. The students are enabled to sense the value of early affiliation with their local county medical society when they enter practice.

The business affairs of THE JOURNAL continue to prosper under the charge of the Executive Committee. Under the present set-up the editor is ably assisted by an editorial board. Under this system no one individual has control, and in addition the work of the editor is subject to consideration and criticism by a group whose interest in this publication is always first. THE JOURNAL is generally considered one of the leading state medical publications in the country.

(Dr. Perry moved the adoption of this report; motion seconded by Dr. F. S. Crockett, and carried.)

Report of Statistician:

We move the adoption of this report.

(The motion was duly seconded and carried.)

Report of Delegates to A. M. A.:

All delegates and alternates attended the American Medical Association convention. In the first session of the open meeting the New York delegation introduced a resolution which would set up a system of Federal medical practice in that it provided for a Federal subsidy of professional services to the indigent and Federal subsidy to medical schools and medical research. Unfortunately the story was given to the press before the house ever met and a resolution was introduced into an open session instead of an executive one. The Indiana delegation vigorously opposed this because this would be the beginning of the complete domination of the profession by the Federal government. Under the wise leadership of Dr. Crockett, who was chairman of the reference committee of the American Medical Association, a report was adopted by the house whereby complete cooperation of the American Medical Association was offered to all branches of government.

Dr. Sensenich was elected a trustee of the American Medical Association for a term of five years. The election of Dr. Sensenich was one of the rare occasions for anyone to be elected to trusteeship without opposition, and it is a tribute to his excellent record. This is only the second time that Indiana has been thus honored by trusteeship.

(On motion of Dr. Perry, seconded by Dr. Ferrell, this report was adopted.)

Ira Perry, chairman,
B. W. Egan,
F. M. Gastineau,
O. R. Spigler,
F. S. Crockett.

DR. PERRY: I move the adoption of the complete report of the committee and that the committee be discharged.

(Dr. Romberger seconded this motion which was carried.)

Sections and Section Work

House of Delegates, Indiana State Medical Association.

Gentlemen:

Your Committee on Sections and Section Work wishes to commend the work of the Committee on Scientific Work and the Committee on Scientific Exhibit. The various sections have presented excellent programs, as in previous years, and the exhibits have again added materially to the success of this convention.

No one appeared before the committee either to support or object to the creation of a new Section on Obstetrics and Gynecology; therefore we recommend that the resolution be tabled.

William C. Wright, chairman,
A. M. Kirkpatrick,
V. L. Turley,
C. G. Kern,
M. F. Boulden.

Dr. Wright moved the adoption of this report; motion seconded, and carried.

Rules and Order of Business

Dr. A. C. Yoder, chairman of this committee, reported that nothing has been referred to this committee; hence the committee had no report to make.

Medical Education and Hospitals

House of Delegates, Indiana State Medical Association.

Gentlemen:

The Reference Committee on Medical Education and Hospitals accepts the report of the Committee on Medical Education and Hospitals as outlined in the handbook.

Your committee also accepts the report of the Committee on Graduate Education as printed in the handbook. We recommend that the subject of regional postgraduate meetings be given some study. We move the adoption of the report of the committee.

C. L. Botkin, chairman,
W. M. Stout,
P. H. Schoen,
G. A. Thomas,
R. L. Sensenich.

On a second to Dr. Botkin's motion by Dr. Shanklin, the report was adopted.

Public Policy and Legislation

House of Delegates, Indiana State Medical Association.

Gentlemen:

We, your reference committee on Public Policy and Legislation, wish to make the following report on the various subjects assigned to us. We o. k. the following reports:

1. Committee on Public Policy and Legislation.
2. Committee on Civic and Industrial Relations.
3. Committee on Public Relations.
4. Committee on the Study of Health Insurance.
5. Committee on Veterans' Hospitalization.

The report of the State Board of Health Liaison Committee to Deal with Social Security Act we wish to recommend for adoption in its entirety.

The resolution in regard to a more concrete affiliation between the allied groups of medicine, dentistry, pharmacy, nursing and hospital associations, is hereby recommended for passage with the understanding that it will increase cooperation among the groups without the sacrifice of our present set-up.

We recommend the passage of the resolution on the Social Security Act as a matter of record.

We recommend the adoption of the resolution on health cooperatives, which furthers the view of your standing Committee on Public Policy and Legislation.

We recommend that the resolution concerning the investigation of the various cults be passed with the understanding that such investigation is for the use of the association members and not for general public information except as asked for.

We heartily concur in the resolution on Infant and Maternal Mortality and recommend the full cooperation of the physicians of the state and therefore recommend its passage.

In conclusion, your committee would suggest that, due to many new activities in the State Association, the following changes would facilitate action by the society at its annual meeting—that is, to coordinate existing committees to reduce the number thereby, and to require all resolutions presented for passage at the state meeting to be in the hands of the executive secretary one week before the date of the convention in order that they might be sent to the proper committees for their consideration on the first day of the convention.

J. E. Ferrell, chairman,
H. M. Rhorer,
H. P. Graessle,
Fred McK. Ruby,
W. A. Thompson.

Dr. Ferrell moved the adoption of this report; motion seconded by Dr. Forster, and carried.

Publicity

House of Delegates, Indiana State Medical Association.

Gentlemen:

Your Committee on Publicity concurs in the reports of the Bureau of Publicity and the Committee on State Fair as printed in the handbook for the House of Delegates.

The Bureau of Publicity continues to perform a very important function with the rapidly enlarging interest of the public in affairs of public health and matters pertaining to the medical profession. The committee is deserving of commendation for its effective work and again has proven the importance of carefully prepared publicity reaching the public at regular intervals.

H. G. Morgan, chairman,
S. D. Malouf,
T. C. Eley,
M. D. Wygant,
J. H. Crowder.

Dr. Morgan moved the adoption of this report. Motion seconded by Dr. Sensenich, and report adopted.

Credentials

Dr. T. W. Oberlin: Nothing new has been submitted to this committee.

On motion of Dr. Oberlin, duly seconded, this report was accepted.

Hygiene and Public Health

House of Delegates, Indiana State Medical Association.

Gentlemen:

No report was received from the Committee on the Study of High School Athletics.

Your Committee recommends that the report of the Committee on the Prevention of Traffic Accidents be adopted as printed in the handbook.

It is moved by your committee that a new committee be appointed to be known as the Committee on Occupational Diseases.

Your committee recommends that the report of the Committee on Mental Health be adopted as read.

Regarding the resolution recommending the creation of a Committee on Cancer, your committee does not feel at this time that the problems confronting the profession as outlined in this resolution would require the appointment of a new committee, and we refer this matter to the Bureau of Publicity. (At this time Dr. Miller moved the adoption of this part of the report; motion seconded by Dr. Paynter, and the above report adopted.)

Your committee recommends that the report of the Committee on Syphilis Control be adopted with these exceptions:

Under the caption, "Points to Be Considered," point No. 9 should be changed to read, "That a full-time physician be employed by the State Board of Health to be in charge of venereal disease educational and consultation work."

Point No. 10 should be changed to read, "That the Wassermann card be changed at the State Board of Health laboratory, omitting the indigent clause and substituting the following: 'The circumstances of this examination are such that I believe that it should be made without charge.' This statement is to be signed by the physician, and that all positive serological tests be reported to the State Board of Health."

This committee further recommends the following paragraph: "That legislation be sponsored to define laboratory practice, to the end that competent laboratories be located at strategic points throughout the state to serve the profession and that these laboratories be in the hands of private physicians specializing as pathologists, and that legislation be sought to enable the State to compensate these laboratories for the work done for indigent patients."

We move the adoption of this report as a whole.

Minor Miller, chairman, Claude B. Paynter,
D. W. Matthews, Max M. Gitlin.
C. E. Munk,

Dr. Miller's motion for adoption of this report was seconded by Dr. Giordano.

Dr. Norman Beatty: In regard to the second part of that program. In setting up a situation whereby private laboratories will be compensated for doing Wassermanns on indigents we run into lots of trouble. We are in the midst of an intensive campaign on syphilis. Every report that I know of has attempted to make Wassermanns easier to obtain, not more difficult. There is considerable difficulty in obtaining funds to carry on even the educational campaign. I would like to raise the question as to the advisability of asking the legislature for money to pay for this work in private laboratories. I think the idea of having that work done in private laboratories is tremendously worthwhile but I doubt the advisability of having the state society sponsor legislation to subsidize the private laboratories.

Dr. F. S. Crockett: It seems to me someone ought to say something about like this. You remember under the previous administration of the State Board of Health tremendous abuse of free laboratory service resulted. The result was that the thing became an ever-increasing load with demands for more money to build up the state laboratory at the expense of private laboratories over the state. When the change was made the so-called indigent had to sign his name and know that his blood was going into the state laboratory as an indigent. It was hoped that that might stop the abuse complained of and keep the work where it belonged, for the State should not be placed in a position of competing with the private laboratories. If we change this procedure so that this work can again flow into the state laboratory, the patient not knowing that his blood goes in as indigent blood, we then re-establish the old abuses.

Dr. F. R. N. Carter: I would like to speak as chairman of the Committee on Syphilis Control. The problem of syphilis control has been very carefully studied. Two very important points must be brought before the profession—one the reporting of names. Very carefully we avoided in our committee report the recommendation of reporting cases by name. We realize that this is a very important problem which will take a year or two to decide. We find that there are counties from which Wassermanns are sent to the state. We also realize on the other side of the fence in the State of Indiana there are some very fine laboratories. To practice medicine without a laboratory would be very difficult for any up-to-date physician. There surely could be no desire on the part of our committee to do harm to the private laboratories. We have considered the problem for a long, long time. Yesterday the pathological men of the State of Indiana came to our aid by agreeing to reduce their fees to $1.00 per blood test. I think that a very fine gesture. I think it is a very fine solution to the problem.

Dr. R. L. Sensenich: One of our problems at the present time in combatting the socialization of medicine is an effort to improve the quality of medical service in rural areas and in areas not supplied with laboratories and hospitals. The thought in the matter of Wassermanns was this, that three years ago, and again two years ago, this House of Delegates went on record as approving two reports of mine recommending that the State Public Health Department organize, or subsidize laboratory facilities in communities not now so supplied. Nevertheless no provision has been made and no effort has been made to secure proper funds for the creation of these laboratories. You are sending out very competent young men into rural areas and then leave them no facilities to work with. I do not wish my patients to have a syphilis diagnosis, unless absolutely necessary, on the basis of specimens that have been one day or more in the mail. There is nothing which benefits the public and the local medical profession like the services of a clinical pathologist who can be used in consultation. The only way you are going to get this is by the state or some other agency advancing some funds. I am for the establishment of laboratories in charge of clinical pathologists whose services will be available in each locality.

The life of the pneumonia patient may depend upon immediate sputum typing and antipneumococcic serum. I think there is no objection to the indigent clause. Doing away with the indigent clause on the card leaves the impression that the Board of Health favors free Wassermanns for everybody regardless of ability to pay. Industry is requiring Wassermanns on all employees as a protection against disability claims and can afford to pay for them. Clinical pathologists receiving pay from the state for some work taken to state laboratories can maintain acceptable private laboratories for the benefit of all. This is of more importance than free Wassermanns for those able to pay.

Dr. F. W. Cregor: I do not wish to enter into a discussion of syphilis, other than to say that the consensus of opinion of syphilologists is that a positive Wassermann should not be taken as a diagnosis of syphilis.

There are two points that are of prime importance in the discussion; one is the confidence that the doctor has in the laboratory doing the Wassermann, and the other is mandating the legislative committee of the Association to do certain things.

Should the State Board of Health establish laboratories over

the state and subsidize a physician to do the laboratory work, and engage in competitive practice as suggested by Doctor Sensenich, it would bring a storm of protest to this organization that would be overwhelming.

I have never heard complaint from anyone connected with the State Board of Health that specimens of blood were rendered unsuitable for examination by sending them through the mail.

Probably the biggest question from an organization's standpoint is interfering with the free hand of the legislative committee by action that has been proposed to this House of Delegates.

DR. M. B. CATLETT: I believe if we would patronize our own men at home that they would do our Wassermanns on our indigent patients free. I have had no trouble with my local laboratories. I don't see why that plan might not be inaugurated all over the state of Indiana.

DR. A. S. GIORDANO: The Executive Committee of the American Society of Pathologists met with Dr. Parran last November in Baltimore to discuss this question of Wassermanns and its relation to the pathologists. It was pointed out that the work of clinical pathologists was in danger of competition by the State. He pointed out the existence in New York state of a law which solved this problem for them; that is, the subsidizing of laboratories in specified areas in which competent pathologists were placed in the areas they desired. They remained as partially subsidized private practitioners until the community could completely support a pathologist in that area—a temporary thing to help the community to establish those pathologists. We feel that while there are objections to it, this is a way of solving the problem.

In order to cooperate with the profession of the State the pathologists yesterday voted unanimously to offer the profession a diagnostic test that would cover 90% of the tests made by physicians for $1.00 to cover costs. We feel that by this method very few Wassermanns will go to the State. We feel strongly that the function of the State is not to compete with any branch of medicine. Its function is to supervise. Seventy-two of the counties in the State do not have laboratories. It is imperative that the service of clinical pathologists be made available to the southern part of the state and even in some sections of the northern part of the State where such services are not now available. The problem is really a larger one than you think and perhaps we should have a committee to investigate and report to the House of Delegates. We appreciate the cooperation of the reference committee and the work of the syphilis committee. We want to do everything to cooperate with you.

DR. BEATTY: I have the utmost sympathy with those who limit their work to the operation of private laboratories. I think it would be wrong to favor anything that would interfere with their right and privilege of carrying on a private practice in that line. Everyone agrees that no state, no governmental unit should openly compete with them in that work. Your committee has been fighting for that point consistently. I firmly believe that the state laboratory should never do any work for any individuals who are able to pay for that work. If private laboratories are going to do that work for $1.00, that is splendid. Their work will increase. Gentlemen, as long as the state laboratory accepts specimens only from you, should we place ourselves in the position of indicting our own members' veracity?

Now then, let us consider this question of running the private laboratory out of business. In Indianapolis the laboratories have informed me that since this campaign has been on their work has increased, as well as that of the State Board of Health. I understand that there is only one specimen in every six or seven hundred which reaches that laboratory through the mail which is unsatisfactory at the time it is received because of delay.

I believe that as long as the state laboratory accepts specimens only from those unable to pay we have no right to place ourselves in the position where the public can say, "Yes, you are even trying to commercialize on syphilis control."

I have talked to a great many of you over the state and I believe that 99 out of 100 want the thing left the way it is. Let's make every effort we can to cooperate with these public movements on syphilis control, but let's try to keep it in the hands of the profession. Gentlemen, can we do it if we are obstructionists, and if we get the name of trying to commercialize it?

DR. MINOR MILLER: I wish to speak both as a member of the reference committee and the Committee on Syphilis Control. Referring first to Dr. Beatty's point as to the legislature supplying funds for laboratories, we have not gone any further than to advise that the State Association recommend legislation of this sort to the legislature. Then it shall be up to the members of the legislature as to what they do.

As to the subsidy of the local laboratories in the different points of the state, personally I agree with Dr. Beatty. I believe that the blood tests could be run in Indianapolis satisfactorily. However, in the diagnosis of syphilis there is a darkfield examination. Our committee finds that in many communities there are no facilities for darkfield examination. We have recommended that these laboratories be in the hands of clinical pathologists. We want it to stay in the hands of the profession.

Concerning the abuses mentioned by Dr. Crockett, when it comes to that change on the card I will confess that I originally sponsored leaving off the indigent clause altogether. However, after talking it over with a number of men, I am perfectly willing to consent to the doctor signing an expression of good faith. I think it is something that any of us could sign without any resentment.

We have been acting slowly on the program of the Committee on Syphilis Control. There is no meeting of the legislature next year. If that committee so decides, these recommendations to the legislature may be changed next year.

As for the laboratory relations Dr. Catlett speaks of in Fort Wayne, quite a number of men near laboratories have the same facilities. What about the fellows out where there are no laboratories? I think some of the indigent work should be paid for. The State has no right to ask doctors to do it for nothing.

DR. SENSENICH: The location of those laboratories are to be in the areas not now supplied?

DR. MILLER: Yes.

On voting, Dr. Miller's motion for adoption of the report of the Reference Committee on Hygiene and Public Health was carried.

AMENDMENTS TO CONSTITUTION AND BY-LAWS

DR. E. O. ASHER: This Committee on Constitution and By-Laws unfortunately has no written report. However, I can report this to you. Our committee agreed to recommend the resolutions which were presented to us by Dr. Romberger for the changes in the Constitution and By-Laws. I move the adoption of our report. (Motion seconded by Dr. Romberger.)

DR. GEORGE DANIELS: Will you please state what we are voting on?

DR. F. T. ROMBERGER: The proposed amendments to the Constitution are as follows:

Article IX, Section 1—The officers of this Association shall be a President, a President-elect, *a first Vice-President, a second Vice-President,* an Executive Secretary, etc.

Article IX, Section 2—*The Vice-Presidents shall not be eligible as candidates for the office of President-elect during the year of their service.*

The changes suggested in the By-Laws are:

Chapter VI, Section 2—*The Vice-Presidents shall assist the President and serve his unexpired term in the order of election in the event of the President's death, resignation, or removal.*

Chapter IX, Section 1—Immediately after the organization of the House of Delegates at each Annual Session, the President shall appoint from the members of the House, reference committees to serve during the session at which they are appointed. *Selection of these reference committees shall be made by the President and his advisors at a time*

sufficiently in advance of the Annual Meeting, so that the roster of the committees may be published in The Journal *and/or Hand Book prior to said Annual Meeting. Such publication shall constitute notification of appointment of the various delegates ot their respective committees. Absenteeism shall be reported immediately to the President, who then will substitute from among those present.*

Dr. W. R. Davidson: I move that the sections referring to the election of a first and second vice-president be stricken out and that the section of the report referring to the reference committees be adopted. (This motion was seconded by Dr. C. B. Paynter, and carried.)

MISCELLANEOUS BUSINESS

House of Delegates, Indiana State Medical Association.

Gentlemen:

The Committee on Arrangements did not submit a written report; however it is apparent to everyone in attendance what this committee has accomplished. That they have faithfully performed their duty is very evident. Your committee moves that this House of Delegates at this time give a rising vote of thanks to Dr. George Dillinger and his coworkers.

The report of the Committee on Necrology is a very complete report. We wish to call special attention to the first three paragraphs of this committee's report as we feel that in these are embodied not only a tribute to our department members but also to each and every one of us. We move the adoption of this committee's report as printed in the handbook.

Report of the Committee on Secretaries' Conference. We move the adoption of this committee's report as printed in the handbook.

There was no report submitted by the Committee on Old Age Dependency.

The following resolution was referred to this committee:

"The dues for admission to membership in the Indiana State Medical Association after July first of any year shall be prorated."

We move that this resolution be tabled.

P. A. Garber, chairman, C. M. Donahue,
H. S. McKee, W. E. Amy.

Dr. Garber's motions were seconded by Dr. Paynter, and carried.

Dr. Herman Morgan: I move you the adoption of a resolution in which we wish to express our appreciation to the Orange County Medical Society and the Third District membership for the fine entertainment we have had as guests here at French Lick. Also that this same spirit of appreciation be extended to Mr. Thomas Taggart and to our good friend, Dr. George Dillinger. Also that we set forth in this resolution our appreciation of the very fine cooperation of the press for the excellent publicity that has been given this meeting. Furthermore, that we commend our retiring president for his very conscientious efforts in behalf of the society and for the excellent work that he has done throughout the year, because he has given unsparingly of his time and energy in the interest of the profession. I move you the adoption of such a resolution. (Motion seconded by Dr. P. H. Schoen, and carried.)

Dr. George Dillinger: There was a meeting of the standing Committee on Legislation and Public Policy last evening and following considerable discussion of a report, that Committee unanimously decided that this resolution should be brought before this House:

"BE IT RESOLVED That each constitutent county medical society be requested to study the problem of mileage charges for rural calls to determine whether or not the rural patient is paying more for medical service than patients of the same financial status in urban areas."

The Chairman: This resolution will be referred to the Reference Committee on Public Policy and Legislation.

Dr. J. E. Ferrell: We report favorably upon the resolution and recommend that the House of Delegates go on record favoring this resolution and that this matter be taken up by the individual counties as stated. I move you the adoption of this resolution. (Motion unanimously adopted.)

The Chairman: If there is no other business, the House of Delegates is adjourned.

INDIANA STATE MEDICAL ASSOCIATION GENERAL MEETINGS

Tuesday, October 5, 1937

The first general meeting of the eighty-eighth annual session of the Indiana State Medical Society was called to order at 9:45 a.m., Tuesday, October 5, 1937, in the auditorium of the French Lick Springs Hotel, by the president, Dr. Edmund D. Clark, Indianapolis.

Dr. Clark introduced the president of the Orange County Medical Society, Dr. J. R. Dillinger, who welcomed the members to French Lick Springs.

In the absence of Mr. Thomas Taggart, Mr. Dwinnell, the manager of the hotel, gave a short address of welcome.

Dr. Herman Baker, Evansville, the president-elect, took the chair during the reading of the president's address by Dr. Clark.

The scientific program was then begun with a paper on "Infections of the Hand" by Dr. Sumner L. Koch, associate professor of surgery, Northwestern University Medical School, Chicago.

Dr. Frank J. Heck, Rochester, Minn., presented a paper entitled, "Interpretation of Routine Laboratory Findings for the General Practitioner."

Dr. Jesse O. Arnold, professor of obstetrics, Temple University School of Medicine, Philadelphia, Pa., presented a paper entitled, "Fluid Balance and Dehydration in the Prevention and Control of Eclampsia."

Dr. Albert C. Furstenberg, dean and professor of otolaryngology, University of Michigan Medical School, Ann Arbor, Mich., presented a paper entitled, "Acute Infections of the Cervical Region and Mediastinum."

The meeting adjourned at 12:15 p.m.

Wednesday, October 6, 1937

The second general meeting was called to order at 9:30 a.m. Wednesday, October 6, 1937, by Dr. C. A. Nafe, Indianapolis.

Dr. Joseph Brennemann, professor of pediatrics, The School of Medicine of the Division of the Biological Sciences, University of Chicago, Chicago, presented a paper entitled, "Appendicitis in Childhood."

Dr. Louis Arthur Buie, professor of proctology, University of Minnesota Graduate School of Medicine, Minneapolis-Rochester, Minnesota, presented a paper entitled, "Diseases of the Anus and Rectum."

Dr. Karl A. Menninger, Topeka, Kansas, presented a paper entitled, "The Psychoneurotic and the General Practitioner."

Dr. Bernard Henry Nichols, Cleveland, O., presented a paper entitled, "Roentgenology as an Aid to Diagnosis of Lesions in the Upper Right Abdomen."

Dr. John S. Lundy, Professor of Anesthesia and Surgery, University of Minnesota Graduate School of Medicine, Minneapolis-Rochester, Minnesota, presented a paper entitled, "Anesthetic Agents and Methods Useful in General Practice."

Dr. Frank H. Lahey, Boston, Mass., presented a paper entitled, "Some of the Newer Developments in Thyroid Disease."

At the completion of the program Dr. Nafe, on behalf of the Association, thanked the essayists who had come from a distance to participate in this meeting.

The meeting adjourned at 12:50 p.m.

SECTION ON MEDICINE

The Section on Medicine of the Indiana State Medical Association was called to order at 2:00 p.m. on October 5, 1937, by the Chairman, Dr. E. M. VanBuskirk, Fort Wayne.

Dr. J. H. Warvel, Indianapolis, read a paper entitled "Protamine Insulin in the Treatment of Diabetes Mellitus." Discussed by Drs. Harvey L. Murdock, Fort Wayne, and Frank Green, Jr., Rushville.

Dr. H. J. Pierce, Terre Haute, read a paper entitled "Common Neoplasms of the Skin." Discussed by Drs. Donald C. McLelland, Lafayette, and E. N. Kime, Indianapolis.

Dr. Emor L. Cartwright, Fort Wayne, read a paper entitled "Chronic Ulcerative Colitis." Discussed by Dr. Louis A. Buie, Rochester, Minnesota.

The following officers were elected for 1938:

Chairman—George Dillinger, M.D., French Lick.
Vice-Chairman—B. G. Keeney, M.D., Shelbyville.
Secretary—Walter L. Portteus, M.D., Franklin.

Dr. Bernard D. Rosenak, Indianapolis, read a paper entitled "Inflammatory Diseases of the Small Intestine, so-called Regional Eleitis." Discussed by Dr. William R. Tindal, Shelbyville.

Dr. C. O. McCormick, Indianapolis, read a paper entitled "Fetal and Neonatal Loss." Discussed by Dr. Karl M. Beierlein, Fort Wayne.

Dr. Darwin M. Short, Evansville, read a paper entitled "Diagnostic Methods in Tuberculosis for the Practitioner." Discussed by Dr. M. H. Draper, Fort Wayne.

Meeting adjourned at 6 p.m.

SECTION ON SURGERY

The Section on Surgery was called to order at 2:00 p.m. by the Chairman, Dr. George Green, South Bend.

Dr. Harold D. Caylor, Bluffton, presented a paper entitled, "Cecum Lignum." Discussed by Drs. J. H. Weinstein, Terre Haute; Don Cameron, Fort Wayne; M. D. Wygant, Mishawaka; O. W. Sicks, Indianapolis, and in closing by Dr. Caylor.

Dr. Charles A. Weller, Indianapolis, presented a paper entitled, "Acute Perforated Peptic Ulcers and Their Relations to Trauma." Discussed by Drs. E. E. Padgett, Indianapolis, and S. J. Donovan, Michigan City.

Dr. Henry G. Weiss, Evansville, presented a paper entitled, "Treatment of Empyema." Discussed by Dr. Frank Maurer, Brazil, and in closing by Dr. Weiss.

Dr. Irvin Abell, Louisville, Ky., President-elect of the American Medical Association, visited the Section and said a few words in discussion of Dr. Weiss' paper.

Dr. Anson G. Hurley, Muncie, presented a paper entitled, "Endometriosis." Discussed by Dr. E. V. Wiseman, Greencastle, and in closing by Dr. Hurley.

Dr. George J. Garceau, Indianapolis, presented a paper entitled, "Treatment of Colles' Fracture." Discussed by Dr. Stewart Crossland, Gary.

The following officers were elected:

Chairman, Paul Beard, M.D., Indianapolis.
Vice-Chairman, Frank Ramsey, M.D., Indianapolis.
Secretary, William W. Wright, M.D., Fort Wayne.

The meeting adjourned at 5 p.m.

SECTION ON ANESTHESIA

The Section on Anesthesia was called to order at 2:00 o'clock, Tuesday afternoon, October 5, 1937, by the Chairman, Dr. Richard B. Stout, Elkhart.

A paper entitled "Ether Anesthesia" was presented by Dr. Roy A. Geider, Indianapolis. Discussed by Dr. Floyd T. Romberger, Lafayette, and Dr. Charles Combs, Terre Haute, and in closing by the essayist.

Motion pictures illustrating the subject "Sacral Anesthesia" were presented by Dr. John S. Lundy, Minneapolis-Rochester, Minnesota. Discussed by Dr. Floyd T. Romberger, Lafayette, and Dr. J. W. Ricketts, Indianapolis, and in closing by the speaker.

A paper entitled "This Anesthetic Business" was presented by Dr. Floyd T. Romberger, Lafayette. Discussed by Dr. C. E. Ragan, Terre Haute; Dr. John S. Lundy, Rochester, Minnesota; Dr. Charles Combs, Terre Haute, and in closing by the essayist.

The following officers were elected for 1938:

Chairman, George Rosenheimer, M.D., South Bend.
Vice-Chairman, Roy A. Geider, M.D., Indianapolis.
Secretary, Lillian Mueller, Indianapolis.

SECTION ON OPHTHALMOLOGY AND OTOLARYNOLOGY

The Section on Ophthalmology and Otolaryngology of the Indiana State Medical Association convened at 2:15 p.m., October 5, 1937, in the basement meeting room of the French Lick Springs Hotel. Dr. Fred McK. Ruby of Union City, chairman of the Section, presided.

The chairman called the meeting to order and, in introducing the first speaker, announced that Dr. D. A. Bartley of Indianapolis could not be present to read his paper because of illness. His paper, entitled "Orbital Tumors," was read by Dr. E. M. Dyar, Jr., of Indianapolis. The paper was discussed by Dr. C. J. Adams of Kokomo, Dr. C. C. Taylor of Indianapolis and, in closing, by Dr. Dyar.

A symposium on "The Middle Ear and Mastoid," was presented by Dr. C. R. Buikstra, of Evansville, whose subject was "The Acute Middle Ear"; by Dr. Keith T. Meyer, of Evansville, who read a paper on "The Roentgenology of the Mastoid," and by Dr. C. F. Leich of Evansville who read a paper on "The Indications for and the Mastoid Operation."

Discussion of the symposium was entered into by Drs. M. Ravdin of Evansville, Dr. J. D. Heitger of Louisville, Kentucky, Dr. J. K. Leasure of Indianapolis, Dr. John R. Frank of Valparaiso, Dr. E. E. Holland, of Richmond, Dr. H. A. Van Osdol, of Indianapolis, and Dr. A. F. Clements, of Evansville.

Dr. A. C. Furstenberg of Ann Arbor, Michigan, presented a paper on "Meniere's Disease." This was discussed by Dr. J. K. Leasure, of Indianapolis, Dr. C. H. McCaskey, of Indianapolis, Dr. B. N. Lingeman of Crawfordsville, and Dr. Joseph D. Heitger, of Louisville, Kentucky, and in closing by Dr. Furstenberg.

Preceding his discussion, Dr. Leasure announced that Dr. John F. Barnhill of Miami, Florida, while on his way to attend this meeting, had met with an accident, and has an impacted fracture of the hip as the result of a fall. Dr. Barnhill sent greetings to the members of the Section. Dr. Furstenberg paid tribute to Dr. Barnhill's unusual ability in his specialty, and expressed regret that Dr. Barnhill could not attend the meeting.

A paper was read by Dr. C. W. Rutherford of Indianapolis on "Retrobulbar Neuritis." This was discussed by Drs. Martha B. Lyon of South Bend, Dr. E. M. Dyar, Jr., of Indianapolis, Dr. B. J. Larkin of Indianapolis and, in closing, by Dr. Rutherford.

Section officers were elected as follows:

Chairman, D. A. Bartley, M.D., Indianapolis.
Vice-Chairman, Carroll O'Rourke, M.D., Fort Wayne.
Secretary, Eugene L. Bulson, M.D., Fort Wayne.

The Section on Ophthalmology and Otolaryngology of the Indiana State Medical Association adjourned at 5:00 p.m.

EXECUTIVE COMMITTEE

September 19, 1937.

Roll call showed the following present: C. A. Nafe, M.D., chairman; C. H. McCaskey, M.D.; E. D. Clark, M.D.; H. M. Baker, M.D.; M. A. Austin, M.D.; A. F. Weyerbacher, M.D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary.

Upon the motion of Doctor Clark, seconded by Doctor Baker, the minutes of the meeting of July 11 were approved.

Membership Report

Number of members on September 10, 1937	2,937
Number of members on September 18, 1936	2,796
Gain over last year	141
Number of members on December 31, 1936	2,840

Headquarters' Office

Monthly statements of Receipts and Expenditures for July and August for the Association committees and THE JOURNAL were approved by the Committee upon the motion of Dr. McCaskey, seconded by Dr. Baker.

Treasurer's Office

Dr. Weyerbacher presented a statement from the Metropolitan Trust Company regarding the Rokeby bonds and reported that a check for $15.00 had been received and deposited. This check represented a distribution of $1.50 per unit of Beneficial Interest on the bond held by the Association, at the close of business on August 25, 1937. The committee was of the opinion that as these bonds are advancing somewhat in value, the Association should hold the bond it has.

1937 Session at French Lick

(1) *Commercial exhibit.* 29 spaces sold: 2 to be sold.

(2) Scientific exhibit arrangements completed with the most elaborate program ever attempted at a state meeting in the field of technical moving pictures.

(3) The speakers' table arrangement for the annual banquet was outlined.

(4) *Seating of past presidents and wives.* This is to be placed in the hands of Dr. Charles N. Combs who was in charge of this last year.

(5) *Certificate of merit* for Dr. Sensenich signed by the members of the Committee. This certificate is to be presented to Dr. Sensenich by Dr. E. D. Clark at the banquet.

(6) *Badges.* Samples of badges inspected by the Committee.

(7) *Governor Townsend to Be Invited.* The Committee instructed the secretary to invite Governor Townsend as a guest of honor to the state meeting, urging him particularly to attend the banquet.

(8) *"The Birth of a Baby."* The Committee approved the mailing of announcements in regard to "The Birth of a Baby," the moving picture that is to be shown at 2 o'clock Monday afternoon, during the state meeting.

(9) *Recommendations of Medical Exhibitors Association.* Letter from F. M. Rhatigan, secretary of the Medical Exhibitors Association, giving recommendations in regard to state medical exhibits, reviewed by the Committee. In Indiana most of the recommendations are carried out.

Postgraduate

(1) Appointment of committee for 1938 made by Dr. Herman Baker as recommended at the last meeting of the Executive Committee. All members have been notified and have accepted.

Legislative, Legal and Social Security Matters

(1) *Elimination of Optometrists from Making Eye Examintions.* Letter received from Virgil Sheppard, acting director of the Division of Public Assistance of the Indiana Department of Public Welfare, in regard to the elimination of optometrists from making examinations under the Social Security Act. Heretofore in four counties of the state, optometrists were used. The Federal Social Security Board has ruled that where an optometrist was used in the examination for blind assistance the state would not secure federal reimbursement and hence the State Board of Public Welfare has removed the optometrists from the list of examiners. The four counties heretofore using optometrists are now being served by ophthalmologists in the adjoining counties. Information concerning this ruling has been sent to the Indiana Academy of Ophthalmology and Otolaryngology.

(2) *Care of Crippled Children in Indiana Under Social Security Act.*

(a) Oliver W. Greer, M.D., Director of Services for Crippled Children, Department of Public Welfare of the State of Indiana, appeared before the Committee and outlined the work of his Bureau and answered questions. Several misunderstandings were cleared up as a result of this conference, one of them being that the Bureau, instead of having a large amount of money upon which to operate, has only $80,000 a year at its disposal, which means that any remuneration received by physicians for doing this work will be very limited. It was moved by Dr. Austin and carried by consent that the president of the Indiana State Medical Association appoint those physicians who are members of the technical subcommittee of the advisory committee to the state Crippled Children's Bureau as a regular standing committee of the State Association. The members of this advisory committee so appointed follow: R. L. Sensenich, M.D., South Bend, chairman; I. C. Barclay, M.D., Evansville; F. S. Crockett, M.D., Lafayette; John H. Green, M.D., North Vernon; L. A. Ensminger, M.D., Indianapolis; Louis D. Belden, M.D., Indianapolis, and C. J. Clark, M.D., Indianapolis. The secretary was instructed to write to the members of this committee, notifying them of their appointment as a regular committee of the State Association to act in liaison with the state Crippled Children's Bureau.

(b) The Manual for the Administration of Services for Crippled Children prepared by Dr. Greer had been distributed to the members of the Executive Committee during the summer.

(c) A letter from Walter U. Kennedy, M.D., of Newcastle, was brought to the attention of the Committee. The Committee instructed the secretary to forward this letter to Dr. Greer.

(d) *Discussion by Committee.* The Committee discussed this question with the result that the following motion was made but not seconded and not acted upon: That only those cases which cannot be done locally should be referred to the nearest qualified specialist for treatment.

(e) *Ohio State Medical Association Bulletin.* Under the date of September 8, the Ohio State Medical Association issued a bulletin to its county society secretaries in regard to the program for medical and health services for dependent children in Ohio. The bulletin reads in part as follows:

> *"This program needs the guidance of physicians and those qualified to provide advice and assistance must be supplied from the membership of the various county medical societies.* The Division of Public Assistance is seeking the counsel and help of organized medicine in each county. *It is hoped that your society will assume this responsibility* and make the most of this opportunity to offer constructive assistance. Administrative details will be worked out for the most part on a local basis, so *it will be up to each county medical society to guide the work in its jurisdiction.*
>
> "Officials of the State Association have held several extensive conferences with officials of the State Division and *have been assured that every effort will be made to adapt the program in each county to local conditions and needs, and on agreements worked out with the local medical society."*

(3) *Compensation for Medical Services Under Social Security Act.* In answer to a request for information in regard to this subject, Dr. Olin West, secretary and general manager of the American Medical Association, wrote to the headquarters office of the State Association, under date of August 9, 1937, as follows:

> "I think I wrote you or told you in a conversation over the telephone some time ago that the Chairman of the Social Security Board has for some time appeared to be very greatly interested in the matter of incapacitation of persons who may be qualified to receive the benefits provided for in certain sections of the Social Security Act. It seems to be true that Mr. Altmeyer also has in mind the possibility of making some arrangement whereby payments may be made to those who are already qualified or who may later become qualified to receive such benefits when they are temporarily incapacitated.
>
> "The Social Security Advisory Council, referred to in the 'release' which was attached to Mr. Altmeyer's letter to Doctor Kennedy, was created some months ago. I think that if you will look over the list of names of the members of this council, you probably will feel, as I do, that the council is so constituted as to insure that the social service point of view will be fully represented and presented.
>
> "Insofar as we have been able to ascertain, it is not intended that any important amendments to the Social Security Act will receive official consideration at this session of Congress."

(4) *Request of Mrs. Jenckes for Information Concerning Norman Baker, Cancer Quack.* Mrs. Virginia E. Jenckes, representative in Congress from Indiana, requested information concerning Norman Baker, cancer quack, who had written members of Congress vigorously opposing cancer research legislation that was up for consideration and passed at the last session of Congress.

(5) *Reorganization Bill in Congress.* Dr. West wrote that just what form the Reorganization Act will take in Congress at the next session is not predictable. The medical profession throughout the country is interested in the Reorganization bill as numerous recommendations have been made by the social service workers that all health services should be placed under a cabinet officer of public welfare who would be dominated by the social service point of view. The profession feels that the United States Public Health Service should be under the direction of a physician and should reflect the viewpoint of scientific medicine.

Resettlement Administration

(1) Request received from Dr. R. C. Williams, medical director of the Resettlement Administration at Washington, that the Executive Committee act as a reference committee whenever contentions may arise over bills that may be presented for medical services rendered Resettlement Administration clients. The Committee granted Doctor Williams' request.

Medical Economics

Correspondence from Clarence Munns, secretary of the Kansas Medical Society, in regard to exemption from payments under the Social Security Act, brought to the attention of the Committee. The Indiana State Medical Association is making its payments regularly at the present time. The results of the application of the Kansas Medical Society for exemption will be watched carefully.

(2) Report on "Middletown in Transition," the book written by Robert S. and Helen Merrell Lynd, as it referred to medical services, brought to the attention of the Committee. Copies of this part of the book had been made previously and sent to the Committee.

(3) *Question of Exemption of State Association from Payment of Gross Income Tax.* This matter is to be studied by Albert Stump and taken up at the next meeting of the Executive Committee.

Venereal Disease Control Program

Recommendations appeared in the August issue of THE JOURNAL.

American Medical Association Meeting at San Francisco, June 13 to 17, 1938

Suggestions made that an Indiana-Ohio special train be organized for that meeting. The Committee felt that this might be worth while investigating.

Organization Affairs

(1) *Too Many Medical Societies.* In its annual report, the Executive Committee spoke against the duplication of medical organizations. An editorial prepared by Dr. Shanklin, editor of THE JOURNAL, upon this subject appeared in the October issue of THE JOURNAL.

Proposed Mental Hygiene Program for Indiana

Dr. Larue Carter, chairman of the Mental Health Committee of the State Association, appeared before the Executive Committee and read the proposed plan for a mental hygiene program in this state. Upon the motion of Dr. McCaskey, seconded by Dr. Clark, the report of the Committee on Mental Health was approved for publication in the October number of THE JOURNAL.

Health Insurance

Correspondence in regard to the HOLC Cooperative Health movement in Washington brought to the attention of the Committee.

Report of Subcommittee on Maternal and Child Health

Dr. H. F. Beckman appeared before the Executive Committee and told of the questionnaire he would like to have sent to the physicians of Indiana in regard to puerperal and maternal deaths in this state. He presented his proposed plan and questionnaire to the Committee which wholeheartedly approved the program, and upon the motion of Dr. Clark, seconded by Dr. McCaskey, the Committee recommended that an article concerning the questionnaire appear in the next issue of THE JOURNAL. The Committee also recommended that Dr. Beckman be prepared to appear before the House of Delegates at the French Lick meeting and make a short statement concerning his proposed questionnaire.

Annual Secretaries' Conference, Chicago, November 19 and 20

All officers of the State Association are invited to this conference.

Medical Advertising

Within recent months, newspaper clippings show that there has been an outbreak of advertising of fake diagnostic machines. Cases of advertising brought to the attention of the Committee.

These matters all have been called to the attention of the State Board of Medical Registration and Examination.

The Journal

(1) Report on advertising was made.

(2) *Tuberculosis Seal Advertisement.* Upon the motion of Dr. McCaskey, seconded by Dr. Clark, it was recommended that a full page in THE JOURNAL be donated for the Christmas seal drive by the National Tuberculosis Association.

(3) *Printing Bids Open for* JOURNAL. Following the reading of a letter from the Evans Printing Company in regard to the continuation of the present printing arrangements, Dr. Austin made the motion, seconded by Dr. McCaskey, that bids for printing THE JOURNAL for one year be opened. The Committee was unanimous in its opinion that the Evans Printing Company is doing a splendid job and that the appearance of THE JOURNAL has improved considerably since the first numbers were printed by this company.

(4) *Subscriptions to* THE JOURNAL *by Non-Members.* A letter was read from the Cooperative Medical Advertising Bureau suggesting solicitation of non-members for subscriptions to THE JOURNAL. It was moved by Dr. Austin, seconded by Dr. McCaskey, that such JOURNAL subscriptions be offered to non-members provided such non-members are not notorious quacks, advertisers, or abortionists.

Malpractice

(1) *Group Malpractice Policy.* Letter from the Nebraska State Medical Association in regard to group malpractice policies brought to the attention of the Committee. The Committee suggested that this material be filed for future reference.

(2) *Change in Medical Defense By-Laws.* Letter received from Dr. William C. Woodward stating that the subject of state medical associations carrying their own legal defense is to be brought up at the annual meeting of the American Bar Association in Kansas City September 26 to October 1. Following the reading of this letter, the Committee authorized Albert Stump to draw up some resolutions calling for some minor changes in the By-Laws of the State Association which he felt would eliminate any question as to the ethical feature of the medical defense plan in Indiana as far as the Bar Association is concerned.

THE EXECUTIVE COMMITTEE

October 3, 1937.

Meeting called to order at the French Lick Springs Hotel at 8:15 p.m.

Roll call showed the following present: C. A. Nafe, M.D., chairman; C. H. McCaskey, M.D.; E. D. Clark, M.D.; H. M. Baker, M.D.; M. A. Austin, M.D.; A. F. Weyerbacher, M.D.; T. A. Hendricks, executive secretary. F. S. Crockett, M.D.; R. L. Sensenich, M.D., and George Dillinger, M.D., also were present.

Membership Report

Number of members September 30, 1937	2952
Number of members September 30, 1936	2796
Gain over last year	156
Number of members Dec. 31, 1936	2840

The monthly statements of Receipts and Expenditures for September for the Association committees and THE JOURNAL were approved.

Reports of the Budget for September for the Association committees and THE JOURNAL were made.

Treasurer's Office

Dr. Weyerbacher read the following letter in regard to the Beachton Court certificates and the Rokeby Liquidation Trust to the Committee:

"In response to the inquiry made by your secretary relative to the status of the Rokeby Liquidation Trust and Beachton Court Liquidation Trust, we give you the following information:

"As of this date the Beachton Court Certificates are quoted at 21 bid, the Rokeby Trust Certificates at 19. We do not have any additional information other than that sent to the certificate holders by the Metropolitan Trust Company as trustee for both liquidation trusts. During the past year the Beachton Court Trust paid $1.50 per share in dividends. A report on this trust should be available in the latter part of this year showing their operations from November 30, 1936, the date of their last report. It is generally expected that they will pay approximately $1.50 per share annually.

"Certificate holders of the Rokeby Liquidation Trust also received $1.50 dividend per share out of the earnings of the corporation for the year ended May 31, 1937. In the report for that period it is shown that approximately $2.20 per share was earned during that period. It is generally expected that from $1.50 to $2.00 per share should be paid in dividends annually.

"We regret that we are unable to give you any detailed information as to the earnings, but such information is not made available except by the Metropolitan Trust Company as trustee when they issue their annual reports."

1937 Session at French Lick

(1) *Commercial exhibit.* 30 spaces sold; 1 unsold.

(2) *Speakers' table arrangement for annual banquet.* Upon the motion of Dr. Clark, seconded by Dr. Baker, the Committee went on record that all members of the Executive Committee should be seated at the speakers table.

The Committee, upon the suggestion of Dr. McCaskey, instructed the secretary to invite Dr. William P. Wherry, secretary of the American Academy of Ophthalmology and Otolaryngology, who was at French Lick to arrange for the meeting of the American Academy of Ophthalmology and Otolaryngology, to take part in all meetings of the Association.

The Committee authorized the secretary to invite Mr. James T. Brownlie, for 17 years president of the Amalgamated Engineering Union of England and father-in-law of Dr. Russell Lavengood of Marion, to sit at the speakers' table.

The Committee also instructed the secretary to invite Mr. Will Braun, business manager of the American Medical Association, and Mr. Harold Sandberg of the Cooperative Medical Advertising Bureau of the American Medical Association, to sit at the speakers' table.

(3) *Pro-rating of medical dues.* The Committee was informed that the delegates from Allen county would bring up an action asking that State Associatioin dues be pro-rated. The Committee suggested that this matter be brought to the attention of the Council at the meeting on Monday.

(4) *Resolution to form health league in Indiana* This resolution prepared by Dr. H. J. Norton, Columbus, Indiana, was to be presented to the House of Delegates. The Executive Committee felt that this matter also should be discussed by the Council.

(5) *Allied Professional Conferences.* Dr. F. S. Crockett of Lafayette appeared before the Committee and spoke of the allied professional conferences that were held in other states. He said that C. B. Jordan, dean of the School of Pharmacy of Purdue University, had brought the matter to his attention. The Committee suggested that this matter also be discussed at the Council meeting.

(6) *Resignation of Dr. VanBuskirk* as a member of the Council brought to the attention of the Committee. Dr. A. J. Sparks has been elected to serve Dr. VanBuskirk's unexpired term.

(7) Letter received from Governor M. Clifford Townsend stating that a previous engagement prevented him from accepting an invitation to attend the meeting.

1938 Annual Session

The Committee was informed that next year's meeting will be the eighty-ninth annual session of the State Association and that the 1939 meeting will be the ninetieth annual session. It was suggested to the Committee that perhaps some extra-special arrangements should be made for the ninetieth session.

Postgraduate

No new report.

Legislative, Legal, and Social Security Matters

(1) *Report on Mental Institutions.* Report of Colonel H. Edmund Bullis, executive officer of the National Committee for Mental Hygiene, in regard to state mental institutions brought to the attention of the Committee.

(2) *Change in Wassermann Cards.*

(a) The following letter from Dr. Verne K. Harvey, director of the State Board of Health, in regard to the action of the State Board of Health concerning the change in Wassermann cards was brought to the attention of the Executive Committee:

"The State Board of Health, in executive session on Monday, September 20, took up in detail the report of the syphilis committee of the Indiana State Medical Association. The specific item of the report which was acted upon was the one regarding a change in the Wassermann card which is used by the State Board of Health laboratory at the present time.

"A resolution was passed which changes the card so that there is no reference made to the indigency of the patient but leaves it to the discretion of the physician, who is sending in the specimen, whether it should be sent to a private laboratory or to the state laboratory. The reverse side of the card is to carry the following notation, without the signature of the physician. 'It is understood that this patient is unable to pay for laboratory service.' This notation will take the place of the other two statements on the back of the card, now in use, which the patient and the physician must sign.

"The next meeting of the State Board of Health will be concerned with other items in the committee's report, in particular that of changing the State Board of Health regulation and allowing cases to be reported by number instead of by name. Consideration is being given to the advisability of routinely running Kahn and Kline tests on all specimens, running the Wassermann test only when the Kahn and Kline are found to be positive."

The Committee recommended that this be brought to the attention of the House of Delegates.

(b) Dr. R. L. Sensenich discussed the change in cards and presented some facts concerning the ruling of the State Board of Health as it would affect laboratories throughout the state.

(3) *Washington State Medical Association Resolution.* This resolution provides that no physician who is not a member of his local and state societies should be allowed to practice in any hospital in Washington state. The Executive Committee referred this resolution to the Council.

(4) *Resolution from Illinois State Medical Society.* Resolution condemning the action of J. Hamilton Lewis in introducing a bill which would federalize physicians was brought to the attention of the Indiana State Medical Association by Dr. J. R. Neal, chairman of the legislative committee of the Illinois State Medical Society. This resolution was referred to the Council.

(5) *Health Insurance.* Article in the New York Herald Tribune, sent to the headquarters office by Dr. A. M. Mitchell, brought to the attention of the Committee. This article states that William Hard, assistant to the chairman of the Republican National Committee, urges "the Republican party to anticipate the New Deal on 'sickness Insurance' by preparing a constructive counter proposal of its own."

(6) *Formation of a Council on Occupational Diseases by the American Medical Association.* Dr. Sensenich explained that such a council was being formed by the American Medical Association due to the passage in many states of new occupational disease laws which make such diseases compensable and thereby bring up a great many new features that involve the medical profession. The Executive Committee recommended that Dr. Sensenich bring this up before the House of Delegates under the heading of new business.

State Board of Medical Registration and Examination

The executive secretary read the following letter from Dr. W. R. Davidson in answer to the communication from the State Association thanking him for his services as a member of the State Board of Medical Registration and Examination:

"Please be assured of my very great appreciation for your letter of the 24th, in regard to my services on the state board. It is all the more pleasing to have such a letter from my own organization and colleagues who have understood the nature of the work.

"In all the time as executive officer, the sole desire was to adhere to the letter of the law as it is laid down, and I have the satisfaction of knowing that this was done. The great purpose was to be sure that no one obtained a license unless he could present the proper credentials as

required by the law. No one ever did obtain a license in any other way.

"The objectors have been men ignorant of the law and who desired the bars let down either for themselves or friends. The law was all right for the other fellow; when it met personal application, then it was all wrong. Too many people even now think that the board office is like a dog licensing clerk—walk in, pay your money, and get a license. And the secretary, no matter who he may be, is always wrong because he does not pass out licenses like handbills.

"As a matter of fact, the work was becoming very irksome for it was interfering with my work at home and from doing a good many things I have desired to do for a long time. It took too many days away from home.

"Again thanking you, I am"

Resettlement Administration

Nothing new to report.

Medical Economics

(1) The question as to the necessity of every physician carrying compensation insurance upon office employees was brought to the attention of the Committee. The Committee authorized Albert Stump, attorney for the Association, to prepare an article upon this subject for publication in an early issue of THE JOURNAL.

(2) *Economy Mutual Health Association Desires Physician.* Word was received from the Economy Mutual Health Association that their physician has left and they desire a new one. The Committee felt that it would be difficult to obtain a reputable physician to enter into the type of contract practice attempted by this association.

(3) *Overcharging by Drug Companies.* Letter brought to the attention of the Committee that certain drug companies purposely overcharge on their C.O.D. statements. The Committee felt that it could take no notice whatever of this until it received definite details and facts to back up such a complaint that certain drug companies are overcharging.

Organization Matters

(1) Letter received from Dr. Leon Zerfas, historian for the Association.

(2) Letter from Dr. Olin West concerning the reapportionment of delegates brought to the attention of the Executive Committee. The letter reads in part as follows:

"The reapportionment of delegates was on the basis of one delegate for each 825 members or fraction thereof for all constituent associations having a recorded membership of 825 or more. Each constituent association with smaller membership is entitled to one delegate.

"The records of this Association show that on April 1, 1937, the membership of the Indiana State Medical Association was 2,958. The Indiana State Medical Association will be entitled to four delegates in the House of Delegates of the American Medical Association 1938, 1939 and 1940."

THE JOURNAL

(1) *Report made on advertising.*

Advertising of radium case pictures. Action of the Bureau of Publicity against the publication of radium case pictures in the advertising columns of THE JOURNAL brought to the attention of the Committee, along with a letter from the Cooperative Medical Advertising Bureau stating that as these advertisements are intended for physicians only and as the pictures inform them, they are entirely legitimate. The Executive Committee felt that the ruling of the American Medical Association should be followed by THE JOURNAL. This action was taken upon the motion of Dr. McCaskey, seconded by Dr. Baker.

Copies of the Journal of the Indiana State Dental Association brought to the attention of the Committee.

(4) *Donation of space in advertising pages for American Red Cross and National Tuberculosis League.* The Committee authorized the donation of a half-page each for the Christmas seal advertising and for the American Red Cross advertising. The Red Cross advertising can be used in the November issue and the Christmas seal advertising in the December issue.

Malpractice

(1) *Change in Constitution and By-Laws.* Dr. Nafe reported on a conference with Mr. Stump and the changes he suggested in regard to the By Laws covering malpractice defense. Upon the motion of Dr. Clark, seconded by Dr. McCaskey, it was recommended that action be withheld concerning these changes at this time.

BUREAU OF PUBLICITY

September 14, 1937.

Present: William N. Wishard, M.D., chairman; C. F. Thompson, M.D., and T. A. Hendricks, executive secretary.

Minutes of the meeting of August 3 signed. Minutes of the meeting of August 17 corrected and approved for signature.

A schedule of releases for the eighty-eighth annual session of the Indiana State Medical Association to be held at French Lick on October 4, 5, and 6, was approved by the Bureau.

Report on medical meeting:

August 26—Grant County Medical Society, Marion, Indiana. "The Syphilis Campaign." (30 present.)

Request for speakers:

September 16—Second District Medical Society, Linton, Indiana. President, president-elect and secretary of State Association to attend.

The following resolution in regard to the syphilis campaign, presented at the annual convention of the Indiana Department of the American Legion and adopted by the convention, was brought before the Bureau of Publicity:

"WHEREAS, the present statutes are inadequate for the the protection of the public in controlling the spread of venereal disease, and

"WHEREAS, physicians, public health officials and many civic organizations under the direction of the United States Public Health Service are promoting a campaign to eradicate syphilis from the United States, and

"WHEREAS, congenital syphilis—that is, syphilis inherited in the newborn from the parents—is one of the most tragic results of the disease,

"THEREFORE, Be It Resolved, that the Department of Indiana American Legion sponsor the passage of a law at the next session of the Indiana General Assembly, making it mandatory that Wassermann and any other necessary blood tests be given, and the findings must be satisfactory before a marriage license may be obtained."

The action of the Legion was heartily commended by the Bureau.

Letter received from the Wayne County Medical Society (Michigan) in regard to the questionnaire sent to the membership concerning the rebate practice.

A letter was received from the chief of the Bureau of Maternal and Child Health of the Indiana State Board of Health stating that the Bureau desired to continue its contact with the county medical societies and assist the county societies in formulating their scientific programs whenever the societies desired the Bureau to do so. The Bureau of Publicity approved the following bulletin to be sent to the presidents and secretaries of the county medical societies:

"Subject: SCIENTIFIC MEDICAL PROGRAMS AND MOTION PICTURES FOR COUNTY MEDICAL SOCIETIES.

"Your attention is again called to the fact that speakers and medical programs are available to all county medical societies. These programs are made possible through the cooperation of the Bureau of Publicity of the Indiana State Medical Association, and the Bureau of Maternal and Child Health of the Indiana State Board of Health.

"These Bureaus are anxious to be of service to county medical societies in assisting them to plan their programs for the coming year. Requests for scientific programs can be sent to either of the above named Bureaus. It is urged that requests be sent in far enough in advance of the date of the program, so that no conflict in programs will occur."

Several weeks ago the Bureau of Publicity received copies of advertisements appearing in various Indiana papers concerning the Irvington "Clinic." The Indianapolis Better Busi-

ness Bureau made a report upon this "clinic" in one of its recent bulletins. As a result many letters have been written to the headquarters office of the State Association asking for further information concerning this so-called "clinic." These letters were all brought to the attention of the Bureau of Publicity. The action of the Better Business Bureau was warmly commended by the Bureau of Publicity.

The Bureau instructed the secretary to inform the Executive Committee of the State Association that it is opposed to a "before and after" advertisement which appears in THE JOURNAL.

COUNTY SOCIETY MEETINGS

DEARBORN-OHIO COUNTY MEDICAL SOCIETY held a meeting at Whitney's Dining Room in Lawrenceburg, September thirtieth. Dr. George M. Brother of Rising Sun, director of the fourth district health unit, and Miss Clark, county nurse, briefly outlined a tuberculosis survey. Moving pictures on venereal diseases were shown under the direction of Dr. Brother and Mr. Boston, the films being supplied by the State Board of Health. Attendance numbered sixteen.

* * *

CARROLL COUNTY MEDICAL SOCIETY members met at Burrows, October fourteenth, to hear Dr. Charles P. Emerson of Indianapolis discuss "Psychoneurosis in General Practice with Particular Emphasis on Treatment."

* * *

At the September ninth meeting, Dr. Ralph Chappell of Indianapolis discussed "Deafness."

* * *

DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY held a meeting at the Hotel Roberts in Muncie September 21, for its first fall business meeting. Dr. F. W. Dunn gave a report of the last A. M. A. convention. The present crusade against syphilis was discussed. Reports of all committees were made. Attendance numbered twenty-one.

* * *

FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY held its regular meeting in the Chamber of Commerce building, Fort Wayne, September twenty-first, with forty-five members present. Dr. S. R. Mercer read a paper on "The Nervous System and Certain Skin Diseases."

* * *

At the October nineteenth dinner meeting of the Fort Wayne Medical Society, Dr. Paul A. O'Leary of the Mayo Clinic was the principal speaker, his subject being "Treatment of Syphilis."

* * *

FORT WAYNE ACADEMY OF MEDICINE held its first fall meeting October twelfth. Dr. L. P. Harshman talked on "Orientation in Psychiatry."

* * *

GRANT COUNTY MEDICAL SOCIETY members and the members of the Grant County Dental Society and Bar Association enjoyed a picnic at the cottage of Dr. Russell Lavengood, west of Marion, September twenty-second.

* * *

INDIANAPOLIS MEDICAL SOCIETY, for its opening fall meeting, met with the Indianapolis Bar Association and the welfare organizations of Indianapolis, October twelfth, at the Indianapolis Athletic Club. The principal speaker was Dr. Max Bahr whose subject was "Psychological Aspects of Crime." Discussant was Mr. Thomas D. Stevenson, attorney.

(Continued on Page xxvi)

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(Continued from Page xxv)

JASPER-NEWTON COUNTY MEDICAL SOCIETY held its September thirtieth meeting at Rensselaer, with Dr. E. C. Loy as host. The principal speaker was Dr. James O. Ritchey of Indianapolis who talked on "Undulant Fever." Twenty physicians, fourteen members and six guests, attended the meeting.

* * *

JAY COUNTY MEDICAL SOCIETY members met at the Portland Country Club, October first, when case reports were presented by Drs. B. M. Taylor, F. E. Keeling, John Lansford, and J. E. Nixon.

* * *

KNOX COUNTY MEDICAL SOCIETY held its regular monthly dinner meeting at the Jewel Cafe in Vincennes, October twelfth. Dr. G. B. Jackson of Indianapolis discussed "Treatment of Toxemia in Pregnancy." The talk was illustrated with moving pictures. Attendance numbered twenty-eight.

* * *

LAKE COUNTY MEDICAL SOCIETY held a dinner meeting at the Lake County Tuberculosis Sanitorium, October fourteenth. Dr. J. O. Parramore and the staff of the hospital were in charge of the program.

* * *

LAPORTE COUNTY MEDICAL SOCIETY members met for their monthly dinner meeting at the Spaulding hotel in Michigan City, September sixteenth. Dr. C. J. Langenbahn of South Bend presented a paper on "Urinary Tract Infections." This was the first fall meeting.

* * *

MADISON COUNTY MEDICAL SOCIETY held its October meeting at St. John Hospital, Anderson, October eighteenth. The meeting was preceded by the staff meeting. Reports of the French Lick convention of the State Association were made.

* * *

MONTGOMERY COUNTY MEDICAL SOCIETY held a meeting at the Culver Hospital in Crawfordsville, September thirtieth. Mr. McCracken and Mr. Scheidler of the Medical and Dental Business Bureau of Indianapolis discussed the operation of the Bureau. Attendance numbered twenty-eight.

* * *

MUNCIE ACADEMY OF MEDICINE met at the Hotel Roberts for a dinner meeting, October twelfth, when Dr. Walter Simpson of Dayton, Ohio, discussed "Fever Therapy."

* * *

NORTHEASTERN INDIANA ACADEMY OF MEDICINE met at the Kendall Hotel in Kendallville, September thirtieth, to hear Dr. James K. Stack, of Chicago, discuss "Injuries of the Carpus."

* * *

ORANGE COUNTY MEDICAL SOCIETY members and members of the woman's auxiliary for the society met at the Boy Scout camp on Lost River, September twenty-second, for a picnic and business meeting. Arrangements were completed for the meeting of the State Association at French Lick.

The next meeting will be held in December at the home of Dr. and Mrs. Teaford of Paoli.

* * *

PORTER COUNTY MEDICAL SOCIETY met at Valparaiso, September twenty-eighth, with Dr. Robert C. Block of Chicago as the principal speaker. Dr. Block talked on "The Tuberculous Cavity in the Lung" and his talk was illustrated with lantern slides. Physicians and nurses attended the meeting.

(Continued on Page xxvii)

(Continued from Page xxvi)

ST. JOSEPH COUNTY MEDICAL SOCIETY met at the Jefferson Plaza in South Bend, September twenty-eighth. Dr. H. D. Pyle of South Bend presented a paper on "Anemia in Infancy and Childhood."

At the October twelfth meeting, Dr. Walter H. Baker of South Bend read a paper on "Fractures." The woman's auxiliary of the society held a business meeting at the same time.

* * *

TIPPECANOE COUNTY MEDICAL SOCIETY members held a meeting at Lincoln Lodge and St. Elizabeth Hospital in Lafayette, October twelfth, in the afternoon and evening. Dr. Francis E. Senear of Chicago presented a clinic in the afternoon and in the evening discussed "Diagnosis and Treatment of Common Skin Diseases."

Two physicians have been voted into membership in this society, making the present membership 94.

* * *

WABASH COUNTY MEDICAL SOCIETY members met at the Wabash County Hospital, October thirteenth, with Drs. E. V. Hahn and H. F. Dunlap of Indianapolis as speakers. The subject was "Newer Types of Brain Surgery."

ABSTRACT

THE PHARMACOPEIA AND THE PHYSICIAN: THE USE OF EXPECTORANTS

CHARLES L. BROWN, Philadelphia (*Journal A. M. A.*, July 24, 1937), believes that indications for expectorants most often arise in inflammatory conditions of the lungs and larger air passages, and since the same expectorant may not be efficient or advisable in the different stages of the disease, the proper selection depends on a thorough understanding of the underlying pathologic condition. In allergic manifestations, as bronchial asthma and asthmatic bronchitis, the degree of bronchial spasm and the character of the accumulated secretion serve as excellent guides in the choice of therapy. The clinical interpretation of the pathologic process is aided greatly by the close observation of the type of cough and expectoration. Furthermore, the art and science of the prescribing of expectorants is dependent on appraisal of the type of cough, the character of the sputum, and the correlation with the stages and clinical features of the causative disease. The expectorant drugs official in the U. S. Pharmacopeia XI are numerous. Accordingly, the availability of so many expectorants may cause difficulty in choice for a particular case. Most of the therapeutic demands can be satisfied by skillful employment of a few representative drugs such as ammonium chloride, potassium iodide, syrup of ipecac, calcium creosotate, terpin hydrate, codeine phosphate, epinephrine, ephedrine sulphate and tincture of belladonna. The selection of a suitable vehicle may be of no little importance in commanding the respect and cooperation of the patient. Syrups of acacia, tolu balsam, cherry, wild cherry and citric acid and elixir of glycyrrhiza furnish a fairly adequate choice. One teaspoonful of one of the following mixtures may be given in half a glass of water every two hours for acute bronchitis or pneumonia: 10 Gm. of ammonium chloride, 60 c.c. of elixir of glycyrrhiza and enough syrup of acacia to make 120 c.c.; 10 Gm. of ammonium chloride and enough syrup of citric acid to make 120 c.c.; or 10 Gm. of ammonium carbonate, 30 c.c. of compound tincture of cardamom and enough syrup of tolu balsam to make

(Continued on Page xxviii)

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ESOPHAGEAL STRICTURE DILATED WITH UROLOGIC INSTRUMENTS

HENRY B. FREIBERG, Cincinnati (*Journal A. M. A.*, May 22, 1937), believes that regardless of the specific complaint of the patient or of the illness that he presents, there is the prime necessity for bearing in mind the interrelationship and the interdependence, as well as the necessity for intimate cooperation, between specialists in their various fields of endeavor. The treatment of esophageal strictures is primarily the domain of the otolaryngologist. The otolaryngologist attempts to treat them by dilation and bouginage of the strictures from above. However, with the development of a dense, almost impermeable stricture, he is unable to introduce even the finest of instruments past this stricture of the esophagus. The next step consists of the performance of a gastrostomy with the formation of a gastrostomy opening to the skin of the abdomen. This enables one to feed a patient through the gastrostomy wound. As the stricture becomes more impermeable, retention of food and of liquid becomes evident in the esophagus above the stricture, causing dilatation of that portion of the esophagus. As a result of this dilatation it becomes impossible for the otolaryngologist to find the upper end of the opening of the stricture. Because of the convergence of the esophageal folds and the formation of pouches and sacculations in this dilated esophagus, attempts to find an opening through which a sound or bougie can be passed from above are frequently unsuccessful. In a discussion of this problem with Samuel Iglauer it was suggested that a cystoscope be introduced into the stomach through the gastrostomy wound, the stomach filled with water and an attempt made to pass a ureteral catheter retrograde up the esophagus. This was done. The technic is as follows: The stomach is thoroughly prepared by frequent washings prior to the examination. The stomach is filled with water through the gastrostomy opening and a cystoscope is introduced into the stomach. One can observe the various regions of the stomach, especially the cardia. In this region one sees the folds of the stomach converge to a central point, which represents the esophageal opening. One then feeds a ureteral catheter through this opening and if the attempt is successful, this catheter traverses the esophageal stricture and soon appears in the mouth. A string is then fastened to the ureteral catheter and the catheter is withdrawn, thus enabling one to recover the string through the gastrostomy wound. The treatment from this point on again becomes otolaryngologic. The advantages of dilating the stricture from below are threefold: First, the method just described may be the only one by which any instrument can be made to traverse the esophageal stricture. Second, there is much less danger of puncturing the esophagus and causing a mediastinitis with its sequels. Third, since a ureteral catheter is flexible, it can follow the contour of the stricture, which is almost always fusiform or spiral.

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I was taking tea with a great city editor on Sunday afternoon when his little daughter came back from Sunday school, carrying an illustrated card in her hand.

"What's that you have there?" the editor asked.

"Oh," said the child, "just an ad about heaven."

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"Take a chance. You can get hit by a train only once."

"If it's 50 miles to Boston," propounded the facetious assistant professor, "and it takes a cockroach with a cork leg two minutes to bore a hole an inch deep in a doughnut, how old am I?"

"Thirty-eight," said the student promptly.

"Correct!" marveled the prof. "How do you prove that?"

"Easy," said the student, "I've a brother 19. And he's exactly half crazy."—*Southern Medicine and Surgery.*

An ambitious young man went to a university professor and said: "Sir, I desire a course of training that will fit me to become the superintendent of a great railway system. How much will such a course cost, and how long will it take?"

"Young man," replied the professor, "such a course would cost you $2,000 and require 20 years of your time. But, on the other hand, by spending $300 of your money and three months of your time, you may be elected to Congress. Once there, you will feel yourself competent to direct not one but all the great railroad systems of our country."—*The Kablegram.*

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THE JOURNAL

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VOLUME 30 DECEMBER, 1937 NUMBER 12

FLUID BALANCE AND DEHYDRATION IN THE PREVENTION AND CONTROL OF ECLAMPSIA*

J. O. ARNOLD, M.D.

Philadelphia



Dr. Arnold

Eclampsia, probably more than any other major obstetric problem, has continued down through the years to baffle the physician and to resist satisfactory solution not only as to its elusive cause but as to its rational prevention and treatment.

While puerperal infection still constitutes the undoubted dominant factor in the production of maternal mortality, the so-called "toxemias" of pregnancy continue to hold a close second place in their destructive effects in the processes of reproduction.

There has been this difference, however, in the problems presented by these two destructive factors. Since the days of Semmelweiss and Holmes and Lister, the battle against puerperal sepsis has been in the open, and against a known and definitely understandable foe, but eclampsia has had just the opposite characteristics, and, therefore, the battle has been waged with far less satisfaction and success. For the past three-quarters of a century, the search for a source or origin from which could come to the pregnant woman a poison or toxin peculiar to her condition, and peculiarly destructive to her pregnancy, has so completely resisted all effort that it is little wonder there have arisen so many theories with so widely varying effects upon treatment and mortality rates.

Theories in the science of medicine are very valuable, and have often led the way to progress, but not infrequently the most plausible theory has had the opposite effect and has long hindered progress. This has been strikingly demonstrated in the history of eclampsia. As long ago as 1842, the resemblance of puerperal convulsions to uremic convulsions, and the observance of albuminuria in both conditions, led to the proposal for the first time in the history of the disease of the disconcerting but none the less alluring theory of a poison in the blood of the pregnant woman—a kidney poison (uremia, for instance)—at any rate. a "toxic aemia" of some sort that would account for all the trouble known as eclampsia, and its pre-eclamptic morbidity. However, it was soon found that the theory of uremia as a cause of this dreaded malady could not be successfully or generally maintained and, therefore, this uremic notion soon had to be abandoned, and some other poison sought to meet the conditions of the new hypothesis.

Thus began long ago the most famous and baffling toxin-hunt in the whole history of medicine. Until the present, pathologists the world over have been vainly searching for a "puerperal poison" that would produce the effects or meet the conditions necessary to maintain the theory of a "toxemia of pregnancy."

That such a theory was foredoomed to failure, and foreseen to have dangerous and progress-hindering possibilities, is forcefully brought to our attention in the following almost prophetic pronouncement concerning this "new theory" by one of America's greatest obstetricians[1] at the time the theory was proposed:

"I have long been of the opinion that the increased excitability of the nervous system generated by pregnancy (which is very analogous to that of the young child—easily excited to convulsions from comparatively trivial causes), together with the natural tendency to plethora and increased muscular excitement, seen in all cases of pregnancy, constitute the predisposing causes of puerperal eclampsia. . . . Such nervous irritation and vascular congestion not only interfere with the functions of the brain, but these changes are often followed by watery or bloody effusions into the substance of the brain, augmenting to a still greater degree, such functional disturbances." . . . "Modern theorists consider such convulsions to be the result of a toxic aemia, or blood poisoning, but the evidence of any poison or malcondition of the blood, is exceedingly meager. . . . Toxic aemia ap-

* Presented before the general meeting of the Indiana State Medical Association at the French Lick Session, October 5, 1937.

[1] Dr. Hugh L. Hodge, Professor of Obstetrics, University of Pennsylvania, 1835 to 1864.

pears to have been inferred, rather than proved. We cannot believe that this new theory is correct, and we fear that its practical inferences may have a serious, if not a dangerous tendency." . . . "On the contrary, we do believe that the nervous system is deranged in pregnancy; that the distribution of blood to the different organs is disturbed, congestions produced, and the functions of various tissues and glands may be altered, sometimes even to a morbid extent. . . . If the blood were in a poisonous condition, as some have come to believe, the poison would still remain after such depletion (purging and blood-letting). . . . It is far more reasonable to suppose that these measures bring relief through their quieting effect on the nervous and vascular excitement by a direct impression on the cerebrospinal system, than by purging the blood."

In the light of such sane reasoning, with seventy-five years of tragic experiences in fulfillment of that remarkable prophesy, and in the light of all that physiological research has done in recent years to identify and establish many of the factors concerned with intracranial pressure and cerebrospinal fluid circulation, and their influences on cerebrospinal function, it was but natural that some of us should have come to the conclusion, some seven or eight years ago, that this great unsolved obstetrical problem—the prevention and control of eclampsia—was in need of a complete dissociation from its long misleading toxemia theory, and that in its stead there should be sought out "some rational basis of treatment directed toward certain fundamental physiological disturbances that occur within the brain." Inspired and greatly aided in this modernizing process by my colleague, Doctor Temple Fay, we came in time to know such a rational basis, and worked out a definite system of successful treatment founded upon that basis. It is my purpose to try to outline for you something of the practical principles and methods involved in this different system of treatment.[2]

Intracranial explorations during the terminal stage of eclampsia and histological studies of the brain have shown widespread cerebral edema, enlarged perivascular fluid spaces and, frequently, punctate hemorrhages as well as occasional focal or extensive subarachnoid hemorrhage.

Pathologically, the eclamptic brain differs little from the "wet brain" or cerebral edema found in other well recognized hydration states, such as acute alcoholic wet brain, status lymphaticus, acute toxic hydration states in children and status epilepticus.

The terminal cerebral symptoms are similar throughout this entire group: Headache, vomiting, irritability, and mental torpor, followed by stupor, convulsions, respiratory failure, and death.

Physiological research in recent years has established many of the factors concerned with cerebral edema, and its consequent disturbed cerebral function. We have found that the methods devised to control these factors and symptoms are readily applicable and reliably effective in the prevention and control of eclampsia.

In April, 1930, we began to employ these methods definitely and routinely in all cases of eclampsia, or threatened eclampsia, coming under our care in The Temple University Maternity, with the result that we have reduced our maternal mortality from "toxemia" to less than one-fourth of the best that we could do by our former methods.

As has been previously stated, the principles involved in these more rational methods are not new and that is one of the reasons why we had faith to apply them—many of them were old and tried and proved. Undoubtedly our success has been due, in large measure, to the systematizing and prolonging of the temporary benefits formerly derived from such well-known dehydrating measures as purgation, sweating and blood-letting. From the start, therefore, our problem and purpose has been to find and to make generally available simple methods by which to maintain the prompt clinical improvement of symptoms, long known to result from these various methods of dehydration.

To function normally, the brain requires large amounts of oxygen. Fluid imbalance—over hydration—with its consequent intracranial pressure, interferes with cerebral circulation and produces anemia and anoxemia with disturbed or distorted brain function which, if prolonged, may entail a dangerously enlarging train of secondary effects, such as increased permeability of capillaries and tissue edema, with all that that may mean in the disturbed function of other organs—heart, kidneys, liver, etc.

Oxygen, therefore—adequate cerebral circulation—must be maintained at all costs, and our experience in the last seven years has demonstrated, beyond the question of a doubt, that fluid restriction and dehydration are the safe and efficient means by which this may best be done. We may not yet know much about some of the remote factors involved in the cause of eclampsia, but do know, now, how to recognize and control the effects of those factors on the water-metabolism of the pregnant woman, and this is undoubtedly a long step forward in the direction of rational and more successful treatment.

It has not been easy, of course, for the medical profession entirely to abandon its theory of a puerperal toxemia, for the more or less blind pursuit of this ignis fatuus of obstetrical pathology has continued so long and so illusively that many physicians have found it very difficult to turn to the less attractive light of old truths restated and followed through to radically different methods, founded upon the more rational basis of a better known endocrine and cerebral physiology. Our

[2] Arnold and Fay: Eclampsia—Its Prevention and Control by Means of Fluid-Limitation and Dehydration. *Surgery, Gynecology & Obstetrics*, Aug., 1932.

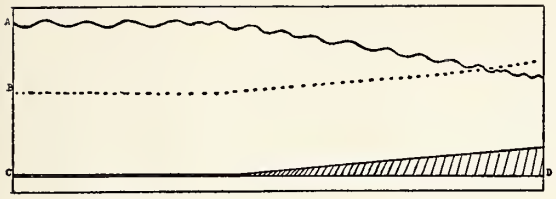


FIG. 1

A. Line of normal decrease of urine output.
B. Line of normal pituitary increase hyperfunction.
C. Line of normal weight-gain-water retention.
CD course of pregnancy.

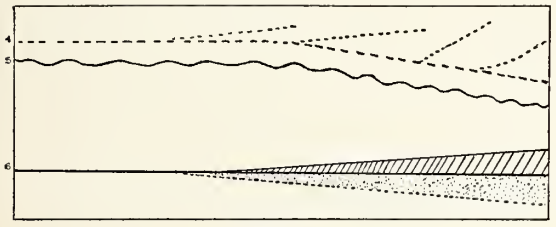


FIG. 2

4. Line of fluid-intake — abnormal increase — "pushing fluids."
5. Line of normal decrease of urine output.
6. Effect on weight-gain, edema — potential danger.

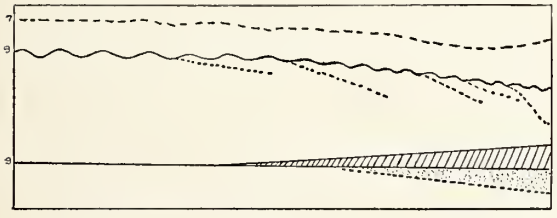


FIG. 3

7. Fluid intake unchanged (or increased).
8. Fluid output suddenly or abnormally decreased.
9. Abnormal water-retention, weight-gain, edema, danger.

experience, however, would indicate that such turning away from misleading theories to well founded principles is in the direction of real obstetrical progress.

Summarizing, then, it may be said that we of the Temple University Maternity Clinic, look upon the "syndrome of eclampsia" with all its forerunning and final manifestations—its headache, vomiting, hypertension, eye symptoms, stupor, convulsions, coma, respiratory failure, and death, as cerebral phenomena, the result of cerebral dysfunction, which cerebral dysfunction is so largely a matter of perverted water metabolism that we no longer hesitate or fear to prevent or control it by the application of a few very simple measures of fluid balance and cerebral dehydration.[3] Some very simple diagrams will enable me further to discuss and illustrate the application of these principles in daily practice.

This first diagram is intended to show some of the normal relationships of water-metabolism in normal pregnancy:

a. Is the line of normal decrease of urine output, as pregnancy approaches term.
b. Is the unknown factor—and might well represent the normal pituitary hyperfunction of advancing pregnancy.
c. The line of normal weight-gain and water-retention, that results when a normal relationship is maintained between a and b.

At this point, I wish to call attention to three very definite conclusions growing out of our clinical observations of the fluid-balance principles here outlined:

1. That no woman will have eclampsia, or near-eclampsia, in whom the principles of fluid-balance, weight-control, and dehydration have been so systematically followed throughout pregnancy as to maintain the normal relationships represented by this diagram.
2. That every woman who does develop eclampsia, or threatened eclampsia, can be definitely shown to have had abnormal water retention leading up to her condition of danger.
3. That this fluid-imbalance, or abnormal water-retention, is the only single factor, symptom, or pathological finding, so far known, that is invariably present in all cases of eclampsia.

These conclusions can only be thus briefly stated in the limited time of this paper, but we have ample data and observations upon which to base our entire reliance in their integrity and in their assurance of success, to those who fully comprehend and apply the fluid-balance principles.

Our second and third diagrams will suggest some of the possible ways in which a dangerous degree of fluid-imbalance may be brought about: For instance, as indicated in Figure 2, if an attempt is made to prevent, or counteract a normally decreasing output of urine, by erroneously increasing the fluid intake, as is often done, the result will not infrequently be seen in an abnormal rate of weight gain, with edema (not always visible but none the less vicious), followed invariably, and often rapidly, by unmistakable signs and symptoms of approaching danger.

Or, as suggested by Figure 3, if for one reason or another, there is a sudden diminution of output while the intake remains the same, or is increased, again there will be a dangerous degree of water-retention, as indicated by the excess shading of the weight line.

It is more than probable, also, that a dangerous degree of fluid-imbalance may be favored, if not actually produced by varying types of distorted endocrine function, peculiar to the physiology of pregnancy.

[3] "The Treatment of Eclampsia." *Medical Clinics of North America*, July, 1934.

For the purpose of emphasis, permit me to repeat in this connection, that while there are unknown, and perhaps unknowable factors back of most cases of eclampsia, yet if we can control the effects of those factors on the fluid balance of the patient, and undoubtedly we can, then we render a life-saving service upon the basis of definitely known physiological facts and principles, rather than upon unproven theory, and, therefore, the scope and value of our clinical experiences in the future can but be enhanced by every advancement in our knowledge of the endocrine and biochemical processes of the body.

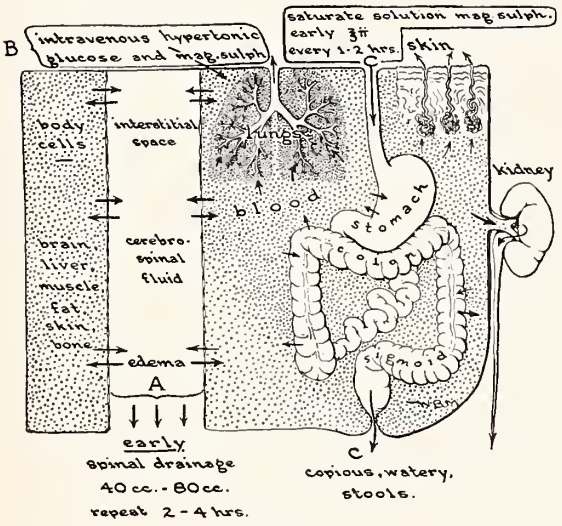


Figure 4.

Figure 4 will help to explain what we call the "A. B. C." of effective dehydration—the three essential steps in the early relief of intracranial pressure, and the restoration of normal cerebral circulation, and cerebral function in such cases as have unfortunately eluded prevention.[4] As here indicated, the harm producing water retention is found chiefly in the interstitial spaces of the body, which includes the cerebrospinal fluid system. This can be drained first and most effectively by:

A. Early spinal tapping—30 cc. to 60 cc. or 80 cc. according to the urgency of the case, and repeated, if necessary, at from 2- to 4-hour intervals.

B. Early intravenous administration of hypertonic solution of glucose (50 cc. of 50% solution), or of magnesium sulphate (20 to 30 cc. of 10% solution), or of both, not together, but alternating for a few doses, at 2- to 3-hour intervals.

C. Putting into the gastro-intestinal tract at the earliest possible moment after A. and B., a saturated solution of magnesium sulphate, for the purpose of helping the blood stream to unload through the bowel, the surplus water attracted from the tissues by the hypertonic solutions in the veins.

These, then, are the essentials of rapid and effectual dehydration, and therefore, the all-important first steps in the control of an eclamptic or near-eclamptic seizure. Each one of these procedures is so important that it is indispensable in any case that has reached the convulsive stage, and in only a relatively small number of the near-convulsive, may the first of these procedures sometimes be safely omitted. One or more spinal drainings, for the purpose of rapidly reducing intracranial pressure, is an expedient that we have found to be invaluable, while instituting the somewhat less direct and more time-consuming, but certainly more lasting and more generally effective dehydration that results from the other two measures. Of the latter, it may be said that since the purpose of the glucose and magnesium sulphate intravenously is primarily and almost wholly to aid in dehydrating the tissues into the blood stream, their use is not to be continued indefinitely, or for more than a few hours unless avenues for the escape of the blood-borne water have been provided early and amply by introducing, from hour to hour, a saturated solution of epsom salts, by mouth, by stomach tube or by rectum. Moderate dehydration through the skin may be helpful, and should be favored.

Early resumption of kidney function is to be welcomed, and is often met with to a surprising degree, when the skin and bowels have been made to take over temporarily the burden of water elimination as above suggested. At no time in the past seven years have we found it necessary or advisable to whip the kidneys back into function by the use of drugs. We have long taken the attitude that these organs are not primarily to blame for abnormal water retention (except in rare cases of pre-existing disease) and, therefore, we have preferred to restore their action by a period of relative rest, rather than by the dubious compulsion of diuretics.

Commenting further on these methods of dehydration, we would say that there need be no fear or hesitancy to begin the relief of actual or threatened convulsions by spinal drainage as early as it can possibly be done, and repeated at such intervals and in such amounts as the urgency of the attack seems to warrant. We have not infrequently seen one or two drainings produce such marked relief of cerebral symptoms that further tappings were unnecessary, or again, we have found it advisable, in order to secure the desired results, to do four, five, six and seven successive drainings. In the meantime, of course, every effort is made to secure that larger, more lasting removal of excess fluid by way of the blood stream through the bowels and skin and, after 48 hours at the most, through the kidneys.

If absolutely necessary to make practicable the first spinal tapping, or the giving of the first intravenous solutions, one dose of morphine (gr. ¼ or

[4] Arnold, J. O.: "Eclampsia"—Temple University *Obstetrical Guide Books*, Corson Publishing Co., 2130 Arch St., Philadelphia, 1937.

gr. ½) has sometimes been given. Our methods contemplate no other use for this narcotic nor for the often equally dangerous barbiturates.

We have occasionally had brought to our attention by those not always fortunate enough to have hospital facilities for their eclamptic patients the fact that spinal drainage could not be immediately or successfully performed and, under these circumstances, we have advised early and copious bloodletting, as a poor but reasonably effective substitute. Also, once in a long time, we have found it necessary to do venesection where there has been or is likely to be unusual delay in securing dehydration by bowel, after beginning the use of hypertonic solutions intravenously.

It is extremely important, of course, not to rob the body of its blood-cell content, but it is often more important to promptly relieve intracranial pressure and thus prevent further destructive convulsive seizures, and when this cannot be done by the best method possible, it may have to be done by the next best.

Early and repeated spinal drainings, in quantities sufficient, have an effectiveness, not only in quieting the convulsive seizures, but in restoring consciousness, and in bringing about early mental clearing, with all that that means in facilitating further treatment, that cannot be hoped for or attained by the use of narcotics, and our experience emphatically endorses a very old statement on this point, that has all too often been forgotten: "While this brain hyperemia exists, other measures (than prompt depletion) are futile, or positively dangerous. . . . Opium and anesthetics will only act as poisons if administered when there is great cerebral engorgement. They will often augment the congestion and increase the serous effusion."—(Hodge's Principles and Practice of Obstetrics, 1864.)

Another question not infrequently arising in this connection is that concerning the advisability of emptying the uterus as a means of combatting the eclamptic attack. We believe that such a course will seldom or never be necessary where the principles of dehydration herein outlined are definitely understood, and fearlessly followed.

In our experience, much of which was under circumstances far from ideal, there has rarely been a failure to prevent seizures in the near-convulsive and in no case (including the six fatal cases in the past seven years) was there a failure reasonably promptly to relieve those in the convulsive group. We have come to feel, therefore, that when for any reason, the eclamptic woman is to have labor induced, or artificially terminated, it is vitally important first to control the convulsive seizures by effective cerebral dehydration, and to reestablish a safe fluid-balance before interfering in any way with the pregnancy or labor. This, in our judgment, applies with especial emphasis to the question of Caesarean delivery—a procedure which we have not done (for eclampsia) since the adoption of these methods. If we were to encounter an eclamptic patient in whom Caesarean delivery would be indicated, regardless of her attacks, we would most certainly control her convulsive seizures before subjecting her to a major operation.

In conclusion: I want to repeat what I have often said before, that not the least helpful result of this getting away from the innumerable notions, and theories and vague uncertainties of the past, is the effect it has had on our own peace of mind and clarity of thinking when confronted with the tragedy of eclampsia, for now we know very definitely just what we want to do, and why we want to do it, and how to do it, in the simplest and most effective manner.

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ABSTRACT

FOOT DISORDERS IN GENERAL PRACTICE

DUDLEY J. MORTON, New York (*Journal A. M. A.*, Oct. 2, 1937), states that physiology indicates that intrinsic as well as extrinsic factors are to be considered in foot trouble. Leg muscles and shoes represent extrinsic factors because they are outside the foot itself. In contrast, intrinsic factors are those which, being located within the foot, affect its internal mechanism directly. The two most common external signs of foot disorder are a pronated, unbalanced posture and callous formation on the sole of the foot, behind the second and third toes. Pronation occurs usually as "weak ankles" early in child life. Its long recognized association with trouble in the longitudinal arch has not only made it the best known sign of foot disorder but has established it also as a morphologic index by which the degree of trouble is estimated. Both of these signs point directly to a functional deficiency in the first metatarsal segment. Two structural conditions have been identified which are directly responsible for the impaired functional qualities of the first metatarsal segment. They are laxity of its plantar ligaments and shortness of the first metatarsal bone. Functional deficiency of the first metatarsal segment furnishes a basis on which the widely diversified range of symptoms in foot disorders are easily interpreted and understood. Their presence must be supplemented by abusive function—abusive, not from the point of view of what normal feet can stand but because it is excessive to the subnormal capabilities of these feet. The abusive elements are of two major classes: (1) unfavorable conditions of function, which apply to environmental or personal factors, such as hard floors, city pavements, high heeled shoes and ill health and (2) excessive degrees of function, such as long hours of work on the feet, violent sports and obesity. Symptoms are traceable to two primary sources: (1) uneven distribution of weight on the metatarsal bones with stresses concentrated chiefly on the second, and (2) loss of structural stability on the medial side of the foot. Ordinary disorders of the foot are not difficult to treat and respond readily to a thoughtful and methodical plan of procedure. The important objective to be borne in mind is first to restore a painless condition and then to establish improved conditions of function. This demands equal attention to superficial irritation, deep traumatic and inflammatory changes and disordered mechanics. Instead of presuming all feet to be 100 per cent proficient, various degrees of limited capabilities must be recognized. The identification of primary causes as defects within the foot is most clearly revealed by an analysis of normal function of the foot and its earliest phases of disturbance. Physicians have no reason to doubt their ability to treat the great majority of feet successfully; certainly they are far better qualified to do so than the agencies to which the public now flocks. Responsibility for the more difficult and exaggerated cases may well be shared with, or referred to, the orthopedic surgeon. But as in other physical ailments, these advanced cases will probably comprise less than 10 per cent of the number that the physician will be able to take care of without aid.

POLYPOID DISEASE OF THE COLON*

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Dr. Buie

The pathologic manifestations of polypoid disease of the colon are susceptible of accurate analysis, and the methods of therapeutic attack, although limited and fraught with discouragement, are generally appreciated. Polyps may possess fibromatous, papillomatous and other histologic characteristics but it is likely that those instances in which adenomatous features are not apparent are rare. Broders[1] assumes that practically all polyps are adenomatous although fibrous and other changes may appear to predominate on rare occasions. He maintains that "polyposis," like "tuberculosis," is the name of a disease and that the disease exists whether one polyp is present or more than one.

In using the term "polyposis," probably most physicians mean a condition in which many polypoid growths are present. From the editorial standpoint, Hewitt[2] has pointed out another objection to the use of the term "multiple polyposis." He maintains that "polyposis" is the name of a disease and, that although growths can be multiple, a disease cannot.

In spite of the fact that the term "multiple polyposis" is incorrect, it probably cannot be thrown out of use at this late date, and there might not be any serious objection to its use, were it not for the fact that it does not always convey the same meaning. One individual may employ it to designate only that condition in which the entire colon is involved, whereas others may refer to an areal or segmental involvement only. It thus becomes necessary for each writer to state clearly and exactly what conditions he has in mind at a particular point in his discussion. Therefore, for the purpose of clarity only, and without the intention of reconstructing the existing nomenclature, let it be understood that the following conceptions and terms apply in this discussion.

Polyps may occur singly or in numbers and they may be sessile or pedunculated. When multiple polyps are present, the condition will be described as "multiple polypoid disease" and a qualifying phrase will be appended in order to designate the situation and extent of the process. Thus, when only the sigmoid is so involved, the condition will be characterized as "multiple polypoid disease of the sigmoid." Therefore, in a given instance, there may be multiple polypoid disease of the rectum, of the rectum and sigmoid, of the descending colon, of the transverse colon, and so on.

When the entire colon is involved by polypoid disease, the condition is present which usually has been called "multiple polyposis" and for this condition I shall employ the expression, "multiple polypoid disease of the colon." Of this condition there are grossly two types; both may be manifest in the same case, but not usually. In one instance the wall of the colon is covered with discrete, polypoid outgrowths in which the sessile types predominate and there is no gross evidence of pathologic development in the tissues which intervene. In another instance there is diffuse, hyperplastic involvement (which may be segmental or total) in which many polyps of all types, sizes and shapes are found as the predominant feature. No portion of the wall of this colon is free from disease. This is an important factor to be evaluated when considering the problem of therapy and will be considered further. When discussing the former condition I shall characterize it as "multiple polypoid disease of the colon," but the latter I shall designate as "multiple polypoid disease of the colon with diffuse hyperplasia."

ETIOLOGY

The question as to whether polypoid disease of the colon develops after birth or as part of some hereditary, familial or protoplasmic peculiarity may be susceptible of solution. However, because of the intricacies of the investigation which would be entailed in the solution, probably it will not be forthcoming. This phase of the subject approaches very near to that which deals with the cause of pathologic proliferation of tissue and therefore it is in the realm of hypothesis, to a great extent. In the present state of knowledge it is generally understood that, in the majority of instances, polypoid disease of the colon originates in some peculiar cellular tendency or arrangement which probably antedates birth. However, there is plausible support for the belief that occasionally these tumors develop as a result of reparative effort, as the body defends itself against the onslaught of infection, irritation, and so forth. No better example of this development is needed than that which is afforded by that form of polypoid disease which occurs in the colon in a case of chronic ulcerative colitis. In this condition I have observed, in the course of repeated examinations, that in a colon which early manifested only the characteristic processes of the infective disease, these little tumors have made their appearance, and in some instances have not only become so extensive as to involve the entire colon but have gone on to form adenocarcinomatous tumors. And it might be added that when malignancy does supervene in such conditions, it is usually of the most virulent type. One of the outstanding phenomena in connection with abnormalities of cell growth is their capacity to multiply continu-

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[1] Broders, A. C.: Personal communication to the author.

[2] Hewitt, R. M.: Personal communication to the author.

ously under suitable conditions. Robertson[3] believes that "cancer does not come from a stimulation of growth, as is so frequently asserted, but because the normal mechanism for orderly growth is disturbed. The mechanism must be inhibitory." Why does not a healing wound in which the proliferation of tissue produces complete repair continue and produce a tumor? Robertson believes that the cessation of the proliferative process is due to an inhibitory mechanism which, under normal conditions, produces a "regular and orderly growth." He also feels that as a result of this influence some individuals possess it in sufficient strength to live a normal span of years and keep all cells of all organs under "reasonable regulation." On the other hand, there are those who do not possess this characteristic, and besides, its effects are more manifest during adolescent than during adult years.

In keeping with the hypothesis that a constitutional factor may be concerned is the fact that heredofamilial history is so often given by those who are afflicted with multiple polypoid disease of the entire colon. Is the condition then congenital or due to hereditary or familial characteristics? One may justly contend that there have been few instances in which the disease has been discovered in infancy at a period when one might deduce that it existed at birth. However, for those who lean toward the congenital hypothesis one might provide an argument equally convincing. In fact, the two ideas possess a significant similarity and one wonders if they are susceptible to total separation. Is it an untenable conjecture that the two ideas are component parts of one? Would it not be sound to assume that there may be certain developments during the embryonic period which will so alter the structure of an individual as to predispose his tissues toward proliferative reaction? Such reaction may occur not only in response to abnormal stimuli acting on normal individuals, but also in response to normal stimuli acting on individuals who are not normal. Thus it is necessary to consider not only the predisposing factor but also that it has to do with the release of this characteristic and which usually is considered under the heading of chronic irritation.

One may only conjecture as to hereditary and familial factors but such characteristics are, to a mild degree, also susceptible of physical analysis. It would seem that there is ground, meager though it unquestionably is, for considering seriously the idea that total multiple polypoid disease of the colon is usually an hereditary condition.

INCIDENCE

There is no reliable method by which the incidence of polypoid disease of the colon can be calculated and probably if exhaustive investigation could be made among the relatives, forebears and descendants of all individuals found to be harboring the disease, the total would reach amazing proportions. In the light of this state of affairs it may seem fruitless to present a statistical report of only those cases which have come to the attention of one individual or of those working in a single institution. Since no other evidence is available, however, it seems that such a record should be included as a part of this discussion, however inconclusive it may be.

From 1925 to 1934 (inclusive), 1234 patients who had polypoid disease of the colon were examined in the Section on Proctology in The Mayo Clinic. In other words, approximately one of every thirty-five patients who complained of a disturbed function of the colon presented this condition.

In order to gain a more comprehensive idea of what we were dealing with, the total group was arranged in three classifications as follows: Group 1 included those patients in examination of whom one or only a few polyps were discovered. Group 2 was composed of those patients in whom multiple polyps were found to be associated with inflammatory disease of the colon. Group 3 included those patients in examination of whom multiple polypoid disease of the entire colon was found.

In group 1 there were 1069 patients, 58 per cent of whom were males and 42 per cent females. The average age of these patients was fifty years and of only 8 per cent were the ages less than thirty years. Only about 2 per cent were less than twenty years of age. In group 2 were 110 patients. Their average age was thirty-eight years and 29 per cent were less than thirty years of age. In group 3 were fifty-five patients whose average age was thirty-seven years. Of these individuals 42 per cent were less than thirty years of age and 11 per cent were less than twenty. The sex distribution within the three groups varied within narrow limits.

A review of the histories of the patients of all three groups of this series revealed that no patient was examined by us until he had passed through a rather long period of disability. In order to determine this period more accurately, the patients included in the three groups, and others who had the same condition and who registered at the clinic during another period, were studied. The records reviewed numbered 1520 and it was found that 53 per cent of the patients had been ill for more than three years. More significant was the fact that 24 per cent of them had been sick for more than ten years, and also that this 24 per cent was composed largely of those patients whose entire colon was diseased.

Thus, when it is considered that most of these patients probably harbored polypoid tumors long before physical disability began, it is realized that no satisfactory estimate of the age when the disease began is obtainable from this or any other record which merely contains a patient's statement as to the probable length of time the pathologic condition had been in existence.

[3] Robertson, H. E.: Polyps of the Colon and Their Possible Significance. *Bull. Am. Soc. Control of Cancer*, 16:6-7 (Feb.), 1934.

PATHOLOGY

The gross appearance of polyps can be best observed by proctoscopic examination, and therefore the condition will be described as it is seen in the rectum and lower sigmoid in vivo.

SESSILE POLYPS

Probably half of the polyps that are seen in routine proctoscopic examinations are small, sessile growths and the patients present themselves because of some disturbance of the bowel which bears no relation to the polyps. These excrescences possess adenomatous structure and on the average are about 5 mm. to 1 cm. in diameter, projecting the same distance above the surface of the mucosa. Often they occur singly, but always diligent search should be made for others and often one or two more will be found.

LARGE SESSILE POLYP

Any polyp which does not possess a pedicle and which covers an area as large as a dime (about 1.5 cm. in diameter) should be regarded with greater concern than those which are smaller. These tumors, when not infected, inflamed, or ulcerative, have almost the same color as the rectal wall and appear innocent but they should not be so regarded. They may grow out into the lumen of the bowel without developing a pedicle and may attain enormous proportions. They may completely fill the rectal ampulla as they grow out from one small portion of the wall of the bowel but repeated microscopic examinations may fail to disclose malignant change. Just as often, however, such transition will be discoverable.

DIFFUSE POLYPOSIS

In this condition, as the term implies, the mucous membrane is involved by a polypoid condition which leaves no normal areas within the segment which is diseased. The term "disseminated polyposis" also has been used to designate this condition and although the condition may occur as a part of the heredofamilial type of the disease, it often will be found to occur independently, as an involvement of a limited segment, usually of the terminal colon.

One of the most distinguishing features of this type of polyposis is the character of the wall of the bowel itself and it will be found that the polypoid disease occurs in conjunction with and as a part of diffuse hyperplasia of the mucous membrane. Sometimes pediculate polyps will be found scattered throughout, and usually when such a condition exists the entire colon is involved.

Often in such conditions, for example, the entire lumen of a portion of the bowel is involved by a mass of polypoid growths, the component elements of which may not be separated or differentiated from each other. Most patients who harbor this condition are past middle age and often the remainder of the colon is unaffected. Usually, somewhere in this mass of polypoid outgrowth will be found tissue classified as "low grade 1 adenocarcinoma in an adenoma" but rarely will a greater degree of malignancy be discovered.

PEDUNCULATED POLYPS

These tufts of polypoid tissue are attached to the wall of the bowel by stems of mucosa and muscularis which project into the lumen. The diameter of the body of the polyp may vary from a few millimeters to that of a mass which will fill the lumen of the bowel, and likewise the length of the pedicle varies widely. The polyps may occur as single tumors or in scattered collections of two, three, or more. Usually, when they appear in greater numbers, they are a part of the heredofamilial disease.

HISTOLOGIC STRUCTURE OF POLYPS

In many polyps the normal character of the epithelium is retained or there may be slight evidence of hyperplasia when inflammatory changes are active. The pedicle of such a tumor is composed of connective tissue derived from the submucosa and is covered with normal mucous membrane.

Sometimes the epithelium may be characterized by failure of the proliferating cells to differentiate completely into normal mucous membrane. In the epithelium of the polyp the cells may be hypertrophied, elongated and compressed, and in areas the overgrowth may pile up into multilayered buds. These may project into the lumen of the tubules as well as into the connective tissue matrix. The nuclei are elongated and are stained more deeply than usual by ordinary methods. The epithelial transition is irregular. Usually the peripheral zone is dark and in it there is increased cellular activity. Later it may be found that the changed epithelium has displaced the more differentiated structure which it has infiltrated.

In certain stages the peripheral dark zone is made up of crowded glandular tubules which may project between the normal glands at the base of the tumor. In many such polyps it will be found that secretions accumulate and form cysts in the deformed and obstructed glands. During this process of epithelial proliferation, changes develop in the submucosal connective tissue which ultimately result in the formation of the papillary structure and even in some of those sessile appearing polyps it will sometimes be discovered that evidence of pediculate formation exists. Additional changes in the epithelium, where the process of differentiation becomes arrested or fails completely, may be noted and as the malignant status is approached, cells may be found that have taken on only rudimentary characteristics of normal mucous membrane. Beyond this, difficulty is encountered distinguishing between polyp structure and carcinoma.

That malignant transition often takes place in polyps of the colon is an established fact but it still remains to determine the frequency with which such change occurs. In making such a calculation it is possible to supply only estimates supported by opinion. A tabulated record of the frequency with which malignancy is discovered in any series might be given, but that would be of little value in

determining the ultimate outcome in those cases in which polyps have not progressed to a mature point in their growth. So definite is the progress of histologic metamorphosis in all polyps of the colon that, given sufficient time, it is believed that all polypoid lesions of the colon, although not actually classified as malignant growths, should be treated as such and whenever possible destroyed promptly on their discovery.

SYMPTOMS AND SIGNS

There is little doubt that polyps may exist singly or in large numbers within a colon for many years without producing physical evidence of their presence. A solitary polyp is more often discovered by "accident" than because the patient has noticed some subjective manifestation of its existence. Often they are found in the course of routine proctoscopic examination of patients suffering with obscure gastro-intestinal symptoms, constipation, and so forth. About a third of these patients will have observed blood in the stool and probably half the time the polyp was its source. Most polyps discovered in this manner are less than 1 cm. in diameter.

A solitary growth scarcely will be capable of producing symptoms unless it is of sufficient size, or occupies such a position, as to cause disturbance of function. A large tumor which is situated in the lower sigmoid or rectum may cause discomfort as a result of hyperactivity in that segment. Abdominal cramps, tenesmus, gas and frequent unsatisfactory attempts to empty the rectum may be manifest and blood and mucus may be passed. Rarely, obstruction may supervene and even more rarely, intussusception may occur. The disability produced by multiple polypoid disease varies all the way from a condition in which the patient may be totally unaware of any discomfort to that unfortunate individual whose colon is completely involved with diffuse hyperplasia, myriads of polyps, sloughing ulceration and malignant invasion. The intensity of symptoms depends on the extent to which the colon is involved and usually it will be observed that when the lower portion of the left half of the colon is involved the subjective and objective manifestations of the disease are increased. The trouble usually begins with vague abdominal discomfort and increased desire to evacuate the bowel. Such symptoms may pass practically unnoticed until blood begins to appear. The period of vague disturbance, especially in the heredofamilial type of the disease, may go on for many years but ultimately the patient becomes more and more unhappy as he bears the brunt of one of the most relentless of all known pathologic disorders. Constant bloody, mucoid and purulent discharges from the bowel, along with abdominal, rectal and anal pain, loss of sleep, loss of appetite, loss of weight and loss of morale, reduce these people to hopeless physical remnants and arouse the pity, mingled with despair, of the physician who attempts, in some manner, to give relief.

DIAGNOSIS

Practically half of the solitary polyps are too small to be felt on digital examination or detected by roentgenographic examination of the colon. The only possibility of finding them exists in the careful visual examination of the interior of the bowel. This method of investigation, together with the cooperation of an expert roentgenologist, constitutes an ideal method of studying polypoid disease of the colon.

On proctoscopic examination polyps may appear as single, minute excrescences, scarcely 1 mm. in diameter, on the mucous membrane, of the bowel, and were it not for the fact that many of these have been removed and have been found to be of adenomatous structure, they might be ignored. The usual polyp is either sessile or pedunculated, and is from 5 mm. to 1 cm. in diameter; the average is less than 1 cm. The sessile polyp usually is of the identical color of the mucosa and in the pedunculated type the pedicle is of the same color but the polyp itself is a darker red. As both of these types become larger they take on changes which are attributable to irritation and inflammation. Sometimes they may slough or become ulcerated and their color is altered into a combination of dark (raw) red and gray, due to exudate and formation of ulcer. Once they are seen they can thenceforward be recognized easily, but great difficulty will be experienced in discovering many of these lesions by digital examination only.

Where involvement is extensive it would seem more difficult to miss the diagnosis than to discover the disease. On digital examination the growths can be felt, and immediately on looking into the recesses of the bowel through the proctoscope the examiner has little doubt as to the meaning of the picture. One word of warning should be given in regard to the soft, polypoid masses which may involve the posterior wall of the rectum just above the anus. Such tumors can be discovered by the sense of touch only with great difficulty and after much experience, and because of the acuteness of the angle formed by the posterior walls of the lower third of the rectum and anus, it is very difficult to bring the area into view by proctoscopy.

TREATMENT

Most polypoid lesions of the colon will be found within that region which can be explored by the proctoscope, and by exercising a few precautions they can be destroyed by fulguration, with little technical difficulty and small inconvenience or risk to the patient. The precautions to be observed are significant and failure to observe them may spell the difference between success and failure in the treatment of any given case. I, therefore, list those features which are of significance in the technic of fulguration, in order that a proper appraisal of its hazards and benefits may be provided.

1. Under no circumstances should this treatment be attempted with the patient under the influence of a general anesthetic. His co-operation is paramount to the proper application of the method. Small lesions, even if they occur in great numbers, can be fulgurated without any form of anesthesia.

2. Anesthesia is employed only when the lesion is so extensive as to require unusual exposure and when the burning process must be carried to greater depths. The purpose of the anesthetic in such cases is to incapacitate the anal sphincters so that they can be dilated sufficiently to permit the use of a speculum which could not be used otherwise.

3. The patient should be placed in the inverted position in order to facilitate visualization of the upper recesses of the terminal colon and exposure of the lesions to be destroyed.

4. Small lesions, especially if pedunculated, can be fulgurated without regard to their position in the bowel, and often this treatment can be carried out in the office. If the lesion is situated below the peritoneal reflection, less care is necessary than if it is in the mobile portion of the rectum or sigmoid, where an excessive burn may cause perforation of the wall of the bowel.

Similarly, if a lesion involves the posterior wall of the rectum it can be burned more thoroughly than when the anterior wall is diseased. As polyps of the anterior rectal wall are fulgurated, the surgeon must constantly keep in mind the proximity of the vagina, the uterus, the urinary bladder, the seminal vesicles and the prostate gland and the extent of the burning process should be modified accordingly.

5. Patients who have been subjected to fulguration of small rectal lesions may remain ambulant but if the lesion is large, or if even a small one is in the mobile portion of the bowel, the patient should be kept in bed and observed closely. A significant factor to be considered in this connection is the period during which the danger of accident is greatest. The two most dangerous complications are perforation and hemorrhage. The former of course is not important if lesions occur in that portion of the bowel where it is below the peritoneal reflection. Thus, in any case in which the wall of the bowel above the peritoneal reflection is involved by the destructive effect of fulguration, the patient should be confined to bed for a week or ten days, after which the bowel is examined and the further plan decided on in accordance with the appearance of the residual condition.

Hemorrhage is most likely to occur when the slough comes away, and therefore, during the first few days after fulguration, this danger can be relatively disregarded. From about the fifth to the tenth day this danger is at its height and all precautions should be taken.

6. Radium can be applied in small doses (topically) in order to provide additional insurance against hemorrhage. Early in our experience at the clinic, in two instances hemorrhage occurred when the slough came away following fulguration and we immediately adopted the plan of using radium as a precaution against additional complications of that nature. Since that time we have never had any difficulty of the kind.

7. The length of the period during which patients should be observed following fulguration varies within broad limits. If the simplest polyps have been destroyed, the patient may be dismissed immediately but if the polyps are larger, more numerous or more complex, more care is demanded. The duration of this period can best be determined by careful re-examination.

In the treatment of multiple polypoid diseases of the entire colon, it is necessary to consider the treatment of that form of the disease which complicates inflammatory disease of the colon separately from that which is heredofamilial.

The former condition usually develops as a part of chronic ulcerative colitis. When it occurs in this connection, or in association with other inflammatory or infective disorders, the primary condition usually demands attention. Fulguration may be employed to destroy those polyps which can be reached through the proctoscope but beyond this nothing can be accomplished by this method. Treatment of chronic ulcerative colitis complicated by polypoid disease may bring about recession, and on occasion even disappearance of the polyps but in many instances this does not occur. When malignant changes develop in this condition they are often found scattered throughout the colon and this fact, along with the virulent type of malignancy which is prone to develop in such cases, renders the problem hopeless. Here radical surgical measures offer the only hope and in the face of the enormous risk which attends attempts at removal of a colon so laden with infection, the entire problem is insuperable.

Although treatment of the heredofamilial disease presents a huge problem, our efforts at the clinic have been rewarded with at least a measure of success and with improved technic we have reason to believe that ultimately a better fate may be expected for the afflicted persons. The object of treatment is destruction of the polyps in that portion of the polyp-bearing colon which can be reached through the proctoscope and removal of that part of the colon which is not accessible through this instrument. Formerly, total colectomy, including the sigmoid and rectum, with establishment of a permanent ileac stoma, was employed in an attempt to prolong life. After the present treatment, the ileum and the terminal colonic remnant can be anastomosed and thereby the normal avenue of exit as well as a portion of the function of the colon can be retained.

There is room for much discussion as to the best method to follow in accomplishing this purpose. It might be considered, for example, that due to the extreme risk of colectomy, this operation should be performed first. Then, if the patient survives, the

rectum and lower sigmoid may be prepared and later ileosigmoidostomy can be performed. In this manner, at the first operation, a temporary ileac stoma can be created and the proximal stump of the sigmoid can be brought out as a stoma in the abdominal wall. Thus fulguration of the higher polyps is facilitated, because this procedure can be carried out through the abdominal stoma as well as through the rectum. Another advantage provided by this arrangement is avoidance of the endless time, discomfort and expense which are required for all the preliminary preparation, only to have the patient succumb, perhaps, when colectomy is performed. Anything which can be done to save these patients additional trouble should be considered, and Jones[4] expressed the belief that by performing preliminary cecostomy the extent of the inflammatory phase of the polypoid disease is reduced and the risk of resection is lowered. Sometimes many months are required to destroy the growths in the rectum and sigmoid. Often several hundred of these lesions will be found and not only must they be fulgurated fractionally, but often it is necessary to allow several weeks or even longer to elapse between treatments. Thus, it is particularly unfortunate if, following such a trying experience, a patient comes to operation and fails to survive.

It should be mentioned that there is still a type of the heredofamilial disease which cannot be dealt with in this manner and it is probable that, until some type of treatment as yet unknown is advanced, total colectomy will have to be employed in dealing with this type of the disease. As previously stated, there are two morphologic types of multiple polypoid involvement of the colon. In one, the polyps are discrete and the wall of the bowel between them is relatively little involved. In this type, the polyps can be fulgurated and, with healing, the bowel which has been so treated is in satisfactory condition for the ileosigmoidal anastomosis. In the other type, however, wherein there is diffuse hyperplasia of the mucosa of the bowel with polypoid tumors superimposed, there is no possibility of clearing the bowel of the polypoid development without destroying the bowel itself. Hence, if fulguration is attempted, there is left only a scarred, contracted remnant which may or may not have sufficient lumen to permit of the passage of feces, and this strictured tube is poor material to which to attach the ileum. In dealing with the "discrete" type, much gratifying work has been accomplished and by the method suggested it seems that much more may be accomplished in the future.

[4] Jones, T. E.: Results of Prolonged Irradiation for Malignant Conditions of Pelvis; Intestinal, Rectal and Bladder Complications; Surgical Treatment. *Jour. Am. Med. Assn.*, **103**: 1678-1681 (Dec. 1), 1934.

TREATMENT OF COLLES FRACTURES*

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Colles fracture is one of the most frequently encountered and constitutes about 10% of all fractures. More physicians treat this fracture than any other. A large percentage of Colles fractures result in healing with deformity even in the hands of competent surgeons. In one large orthopedic hospital 78% resulted in shortening of the radius and 75% healed with widening of the wrist. It is true that the deformity most often is accompanied with very little loss of function. This paper is based on a result study of 38 cases of Colles fractures and 4 reverse Colles fractures. In every instance the writer followed the treatment throughout. The typical Colles fracture is described as one through the distal inch of the radius with the line of fracture running from below upward to the dorsum of the radius.

In this series the line of fracture was often transverse and the distal fragment often comminuted. The radio-ulnar joint was dislocated in about 50% of cases. The ulnar styloid was fractured in 66%. There were 21 excellent results or 55.2%; 12 good results or 31.6%; 3 fair results or 8%, and 2 poor results or 5.2%. The excellent and good results accounted for 86.6%. In 13.2% there was noticeable deformity. One of the poor results was due to persistent dislocation of the radio-ulnar joint. The other classified as poor was a malunion due to failure in reduction. This malunion was later corrected and can now be called a good result.

In the normal wrist the radius is longer than the ulna. There is a volar inclination of 70° to 80° in the articular surface of the radius. The prominence on the dorso-ulnar aspect of the wrist is formed by the radius when the forearm is pronated and by the ulna when supinated.

Often after reduction and splintage the x-ray will show a good reduction, but on removal of the splint the surgeon is surprised to find deformity of the wrist. The common deformities are radial deviation of the hand, widening of the wrist, persistent dinner fork deformity, and absence of the normal prominence on the ulnar side of the wrist.

If deformity results in 13.2% in this series, what then are the reasons and how may this be avoided?

The reasons may be tabulated as follows:

1. Shortening of the radius due to impaction or comminution. Shortening may also occur after removal of the splint due to too soft callous or absorption of bone at the line of fracture.
2. Tears of the ulnar collateral and radio-ulnar ligaments cause widening of the wrist joint.
3. Dislocation of the radio-ulnar joint will cause a disappearance of the prominence on the dorsum of the wrist.

* Presented before the Section on Surgery of the Indiana State Medical Association at the annual session in French Lick, October 5, 1937.

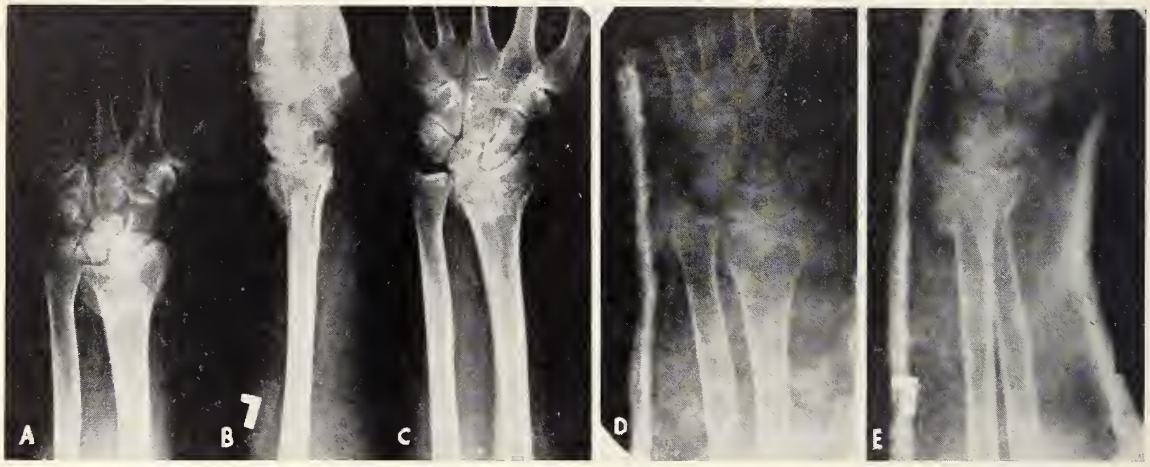


Fig. 1. Impacted Colles fracture demonstrating shortening of the radius and loss of volar inclination of the radial articular surface. Length of radius not completely restored, ⅛ inch shortening. Slight deformity resulted.

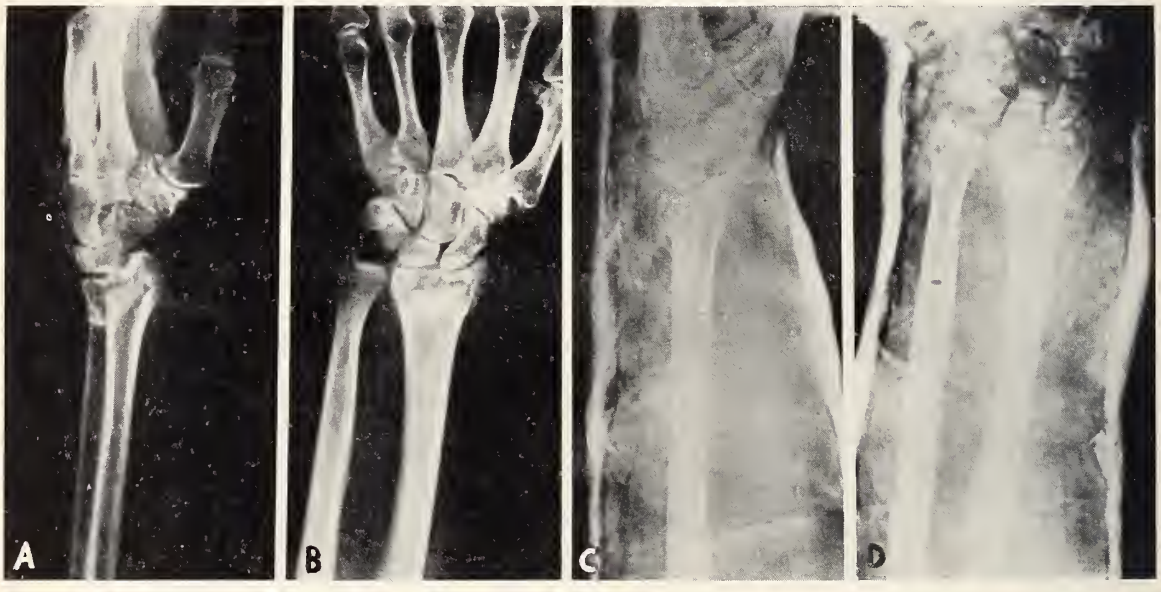


Fig. 2. Colles fracture, communition, radial shortening, dislocation of radio-ulnar joint, loss of volar inclination of radial articular surface and widening of wrist. Incomplete reduction under local anesthesia. Result: noticeable deformity.

4. Change in the volar inclination of the articular surface of the radius will cause the dorsum of the hand to appear prominent.

To avoid deformity, treatment must be meticulous and a definite plan must be followed. In discussing treatment it is necessary to include anesthesia, method of reduction, type of immobilization, and restoration of function.

Local anesthesia as advocated by Bohler[1] has certain disadvantages. In impacted fractures the novocaine does not reach the surfaces of the fracture and, therefore, the anesthesia is not satisfactory. In comminuted fractures the radius is well anesthetized. If the distal radio-ulnar joint is dislocated, even injection of this area will not give complete relaxation. Therefore, unless there are definite contra-indications, we prefer general anesthesia.

The method of reduction is rather simple. In impacted fractures the hard cortical bone of the upper fragment is disimpacted from the cancellous bone of the lower fragment by manipulation in the line of the deformity. Traction is then applied to the hand by pulling on the fingers and thumb. The operator then exerts pressure on the dorsum of the lower fragment, pushing it into flexion. These

[1] Bohler, Lorenz: The Treatment of Fractures, Fourth English Edition, 1935, William Wood and Co.

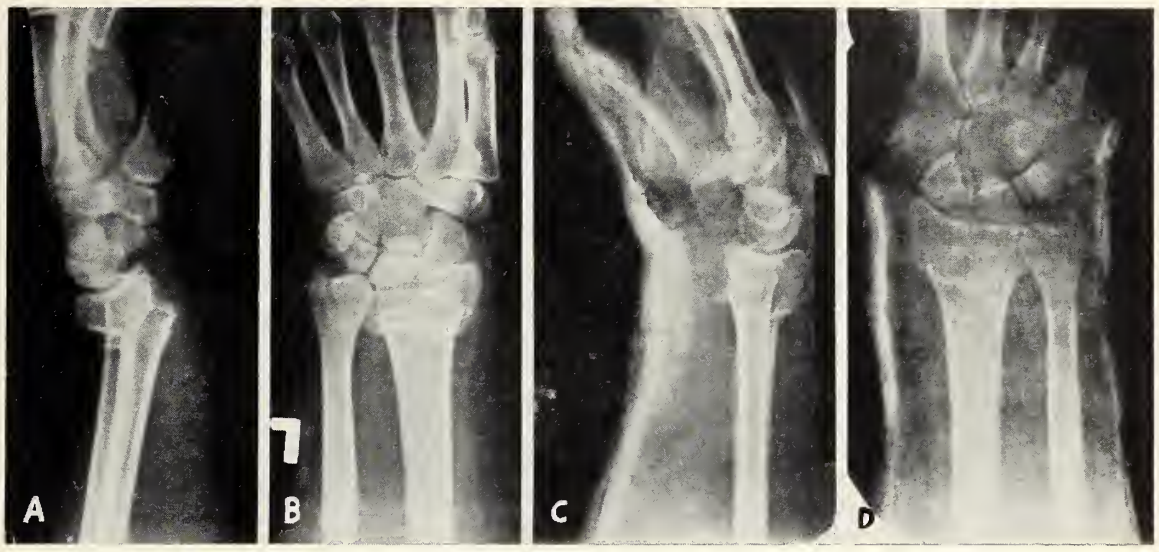


Fig. 3. Comminuted Colles fracture. Radial shortening, good restoration except of volar inclination. No deformity.

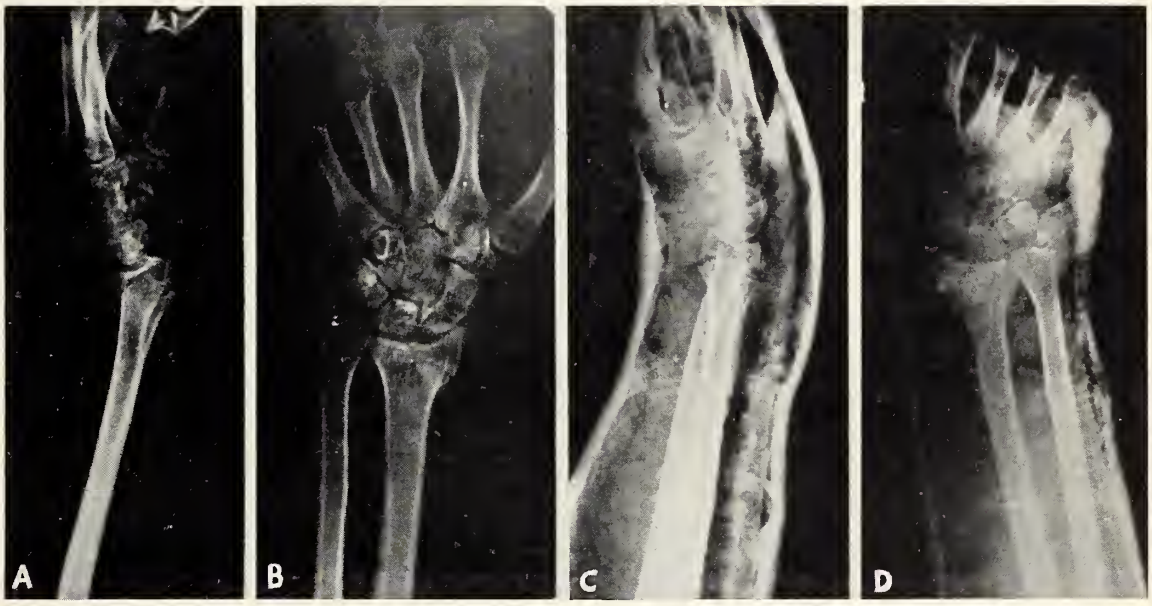


Fig. 4. Malunion with radial deviation of hand, dinner fork deformity and widening of wrist, fracture of ulnar styloid. Good correction by open osteotomy and bone wedge insert to restore length.

movements are made with the forearm in pronation. The forearm is then supinated and pronated to reduce the dislocation of the radio-ulnar joint. The radius and ulna are pressed together to prevent widening of the wrist. By rotating the forearm, palpation of the radio-ulnar joint will determine if it is reduced. Strong ulnar deviation of the hand will restore the length of the radius. The forearm is now ready for immobilization. Plaster is preferred. It can be used as a volar splint, dorsum splint, or a circular cast.

A slight amount of padding is permissible. The forearm is immobilized in semi-pronation, the hand in ulnar deviation and slight palmar flexion. The cast extends from just below the elbow to the metacarpo-phalangeal joints. The cast is trimmed at the palm to allow flexion of the metacarpo-phalangeal joints to 90°, and at the base of the thumb to allow abduction. In non-comminuted fractures immobilization is maintained for 4 weeks. In comminuted fractures the cast is removed in 6 weeks. Two or three weeks is too short a period. The callous is soft and deformity will occur after removal of the cast. During the period of immobilization the patient is instructed to raise the arm over the head several times daily to prevent dis-

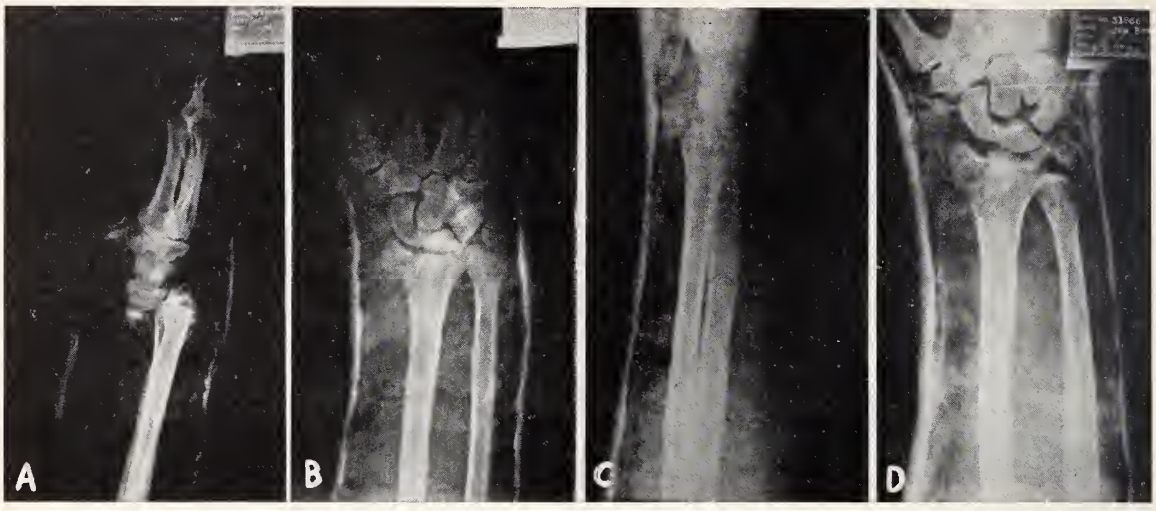


Fig. 5. Reverse Colles demonstrating comminution, radial shortening, fracture of ulnar styloid. Reduced by traction, through Kirschner wires through olecranon process and head of metacarpals. Excellent result.

ability in the shoulder. In elderly people, carrying the arm in a sling will result in stiffness in the shoulder. The patient must be encouraged to use the arm and fingers as early as possible. When this is done the restoration of function is not prolonged. Active motion is much better than passive motion. Diathermy and massage are of value but very few of our patients receive them.

Complications are fortunately rare. Acute traumatic bone atrophy occurred in one patient. This patient recovered after 15 months of physical therapy. I somehow doubt that the treatment had much to do with the recovery.

A pre-existing arthritis may become aggravated. Treatment with baking, diathermy, mecholyl, and exercises are of benefit. We have not observed that massage of the hand and wrist is beneficial.

Non-union of the radial styloid process is of no importance although that region of the wrist may remain tender and painful for a few weeks.

Fracture of the carpal scaphoid occasionally is present. If not detected at the time of the reduction the patient will complain of pain and weakness in the wrist. In such instances an x-ray taken especially for the scaphoid should be taken. This associated injury was found but once and recovered on immobilization for 12 weeks.

Dislocation of the radio-ulnar joint persisted in one case in this series and must be kept in mind. In this particular instance the joint was reduced but immobilization was maintained for only 14 days. If the period of immobilization had been prolonged to 5 or 6 weeks the ligaments would have healed and an excellent result would have been obtained.

There were 4 cases of reverse Colles fracture. All were excellent results. One case had an open reduction. Two were reduced by simple manipulation. One was reduced by traction applied to a Kirschner wire through the olecranon process and the heads of the metacarpals. Plaster immobilization was maintained for an average of 28 days.

SUMMARY

1. Complete reduction is necessary. The length of the radius must be restored and radio-ulnar joint reduced.

2. Immobilization in plaster for 4 to 6 weeks is necessary for firm union.

3. Active use of the arm and fingers shortens the period of disability.

4. Reverse Colles must be differentiated from Colles fractures.

508 HUME MANSUR BLDG.

DISCUSSION

STEWART CROSSLAND, M.D. (Gary): I was glad to hear Dr. Garceau bring up the question of the shortened radius. It is a very important thing in the cause of these disabled wrists.

Another important thing which Dr. Garceau brought out and which should be stressed more is fixation. I think the use of an anteroposterior splint is wrong. The ordinary splint that you buy from the splint manufacturer is wrong, because you immobilize nothing with either of them. If you put on a snugly fitting cast, you have better fixation. The important thing about it is when you put it on. Colles fracture is not a case in which the patient comes into the hospital at nine o'clock at night and you make the reduction tomorrow. Colles fracture is an emergency just the same as appendicitis. You are within the realms of safety if you put on plaster before the swelling sets in, within an hour or two hours after the fracture occurs. The only thing we do is to allow the use of the hand as Dr. Garceau told you. The important thing is not to take off the plaster. The wrist-joint practically never stiffens because of the fixation. In examining a large group of joints that have been fixed anywhere from three to five or six

months, we found practically normal joints. If you immobilize that group so the hand cannot be used, then you will stiffen up the joint. I think Dr. Garceau's experience is the same as mine, that if you have these patients use their fingers, taking away their slings and having them try to do little things with their fingers, you will have very little difficulty. I have seen a good many of these cases; go in and look at the x-ray, see an excellent reduction, and think all is well. You see a picture taken a month or six weeks later and you will note some radial shortening or the angle is off. Behind every one of these comes the history from the patient that the hand was taken out of the sling or the cast was taken off or was bivalved, the hand was massaged, or something was done; in other words, you try to do too much for your patient. The only thing you need to do is to check with the x-ray.

ABSTRACT

EARLY DETECTION AND TREATMENT OF DEFECTIVE HEARING IN CHILDREN

Horace Newhart, Minneapolis (*Journal A. M. A.*, Nov. 13, 1937), stresses the importance of the early discovery of deficiencies of hearing in children by accurate methods recently made available, which make possible the more effective treatment of diseases of the ear ersulting in defective hearing. Many factors, ordinarily overlooked, have caused the failure to secure more satisfactory results in this field of preventive medicine. Among them the following should be mentioned: 1. The inaccessible anatomic location of the ear has been a difficult barrier to otologic research, diagnosis and effective treatment of diseases of the ear causing defective hearing. 2 Because of the physiologic factor of safety, whereby man has been given a materially greater bearing acuity than is required to meet his ordinary needs in civilized life, a person may lose a considerable percentage of his hearing acuity without being conscious of his loss. This fact accounts for frequent neglect of the ears until it is too late to obtain the most satisfactory results from treatment. 3. A most important factor has been the inadequacy of the older methods of testing hearing acuity to disclose a slight but significant loss of hearing. The individual merits and shortcomings of the older tests are too many for enumeration. Tuning forks, when properly calibrated as to their decadence, when struck with a uniform blow and when used in a place affording sufficient quiet, are valuable for determining the presence, type and degree of loss of hearing when the saving of time is no object. The one most effective measure for actual accomplishment on a large scale in the field of prevention of deafness is the regular, periodic testing of the hearing of children during the school age. Then large numbers are kept under close supervision, can be accurately tested in groups by screening methods for the purpose of detecting those having a significant defect, and are available for frequent observation. The best results from preventive and corrective treatment are possible at this age. Audiometers of different types afford the most accurate and practical means of detecting and measuring impairment of hearing. There is urgent need for the enactment of federal and state laws which will make possible the incorporation in the public school health program of periodic audiometric tests of all school children, especially in rural areas. Increasing interest in the health of the preschool child is a special challenge to the pediatrician, since he has the first opportunity to determine the presence of diseases which threaten the integrity of the organ of hearing.

COMMON NEOPLASMS OF THE SKIN*

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Common skin tumors, frequently encountered by the general practitioner, usually have a characteristic appearance that leaves little if any doubt as to diagnosis. A simple history revealing the age of the patient, the duration and rapidity of growth of the lesion usually will suffice to clear up all doubt as to diagnosis.

The first group of cases to be discussed are benign lesions. Common growths of this classification are warts, corns, callouses, keloids, vascular and pigmented nevi. There is much diversity of opinion as to the proper treatment of most of these lesions. Every physician is entitled to his own opinion in this respect but should be familiar with the advantages and disadvantages of other types of therapy.

There are many types of verrucae occurring on numerous parts of the body. Probably we have all adopted some one or more of the countless types of local treatment which have proved to be satisfactory in eradicating warts. Most verrucae respond very satisfactorily to radium or x-ray treatment. The advantage of x-ray or radium in treating warts is that the patient experiences no pain and there is no resulting scar. The types of warts especially adapted to radiation therapy are lesions extending beneath the nails and plantar warts.

Keloids respond more satisfactorily to radium or x-ray than to any other type of treatment. Best results are obtained when therapy is begun as soon as possible following the injury which produced the keloid. Even in keloids of long standing, excellent results can be assured by surgical removal of the lesion followed immediately by radiation therapy directed to the incision before the skin margins have united.

Corns and callouses may be removed by x-ray treatment. Following any method of removal they will, of course, recur unless the cause for their occurrence is corrected by properly fitted shoes.

Nevi refers to the large group of new growths of congenital origin which are usually evident at birth but may not appear until later in life. These lesions may be divided into two groups, the vascular and non-vascular types.

The non-vascular type is generally referred to as a mole. Numerous types of moles are recognized and they vary in size from pin-point moles to lesions covering a large area of the body. The most common indication for removal of moles is cosmetic improvement. X-ray and radium have no selective action on the usual type of mole and these lesions are best removed by fulguration or surgery. Some nevi of the papillary type are

* Presented before the Section on Medicine of the Indiana State Medical Association at French Lick, October 5, 1937.

sensitive to radiation therapy and in carefully selected cases this form of treatment gives good results.

The problem of the pigmented mole as a source of potential malignancy is still an unsettled question. Most authorities agree that any mole located so that it is subject to chronic irritation is a potential source of danger. The type generally considered most dangerous is the deeply pigmented lesion usually containing black or dark purple pigment. Such lesions are best removed by wide surgical excision or surgical diathermy.

Occasionally we see a pigmented mole which has taken on new characteristics over a period of a few weeks. Any change in appearance of a mole strongly suggests the possibility of melanocarcinoma. The usual findings which arouse suspicion are increased depth of pigmentation with perhaps a few new spots about a mole which was previously sharply circumscribed; crust formation with slight induration about the lesion may be observed. Occasionally an ulceration which bleeds freely is seen.

Wide surgical excision is by far the most satisfactory method of treatment if this procedure is possible. The specimen should always be examined by a pathologist in order to clear up doubt as to prognosis of the case. Because of adjacent bony structures and surrounding infiltration it is not always anatomically possible to perform a wide excision. In such cases x-ray is of much value. Most melanocarcinomas are about as resistant to the effects of radiation as is normal tissue but destructive doses of x-ray closely shielded are effective.

The vascular nevi are of several types: Flat capillary nevus or port wine stain. This type of lesion is best left untreated. Satisfactory results are not obtained by any type of treatment.

Strawberry marks are elevated superficial bright red patches. These respond very satisfactorily to properly administered radium treatment.

Cavernous hemangiomas and strawberry type nevus are perhaps the only types of benign neoplasm of the skin which the radiologist alone should treat. In the treatment of these lesions no other form of therapy is comparable to radium. Surgery, electrodessication and the use of carbon dioxide snow are methods which will give results but their use is painful and scar formation results.

The extremely common keratotic lesions observed so frequently on the skin of elderly people are properly referred to as senile keratosis or seborrheic keratosis. Keratoses most frequently occur on the face and hands. They are especially prone to develop with advancing age on the skin of fair complexioned individuals having the thin, dry type of skin. The small, flat or slightly elevated scaley type of keratosis responds readily to frequent applications of a skin lubricant such as olive oil or any bland ointment. Large encrusted elevated keratoses have a base composed of red granular tissue which is exposed when the crust is removed. This type of keratosis will not respond to simple local applications and should be considered a potential source of malignancy. These lesions may be removed painlessly by x-ray or radium treatment and leave no scar. They usually require only one application of the proper dose of radiation.

Epidermoid carcinoma is the only common malignant neoplasm of the skin. Epitheliomas retain the microscopic characteristics of the layer of epidermis from which they originate. The pathologist can accurately diagnose them as either basal, squamous or transitional cell epitheliomas. Basal cell epitheliomas are by far the most common type, the squamous cell is seen frequently, and the transitional cell is relatively rare. The history of the case, the appearance and location of the lesion usually are so characteristic that the experienced physician can make a clinical diagnosis of epithelioma and frequently differentiate between the basal and squamous cell type with a fair degree of accuracy. However, there is no indication that biopsy disseminates the malignant cells and microscopic examination always should be made in case the lesion presents atypical characteristics. The importance of differentiation between the types is due to the fact that they behave in a different manner clinically and have a different prognosis. Basal cell carcinoma is extremely sensitive to radiation therapy and seldom metastasizes. The squamous cell type is relatively more resistant and is prone to metastasize to regional lymph glands.

Carcinoma of the skin may be successfully treated by any method which completely destroys or removes the entire growth. Certainly a large number of them are cured by surgery or surgical diathermy. Even the ancient and painful method of chemical cautery in the form of arsenical or zinc chloride paste occasionally effects a cure. The success of these methods necessitates removal or destruction of a wide area of normal tissue surrounding the growth.

The success of radiation therapy in the treatment of skin cancer depends upon the selective action of radium or x-ray. By selective action we mean that the dose of radiation which destroys the malignant growth does not permanently damage the surrounding normal tissues. It is because of this selective action that recurrence of malignancy treated by radiation is much less frequent as compared to any other type of treatment. Obviously less scar formation results because the destruction or removal of a wide zone of normal tissue does not occur.

Epitheliomas of the different types vary considerably in their sensitivity to radiation therapy, but we know that adequate irradiation will destroy even the more resistant squamous cell epithelioma unless the lesion has invaded bone or cartilage.

In conclusion, there is almost no excuse today for conditions of this kind to exist. There are radiologists in almost every community who do this type of work. All cases of carcinoma of the skin are cases that have been improperly treated or neglected.

627 Cherry Street.

DISCUSSION

Donald C. McClelland, M.D. (Lafayette): I have just a few additional points to bring out. One concerns biopsy. Biopsy is not always the harmless procedure that it is usually thought to be and many times it is of more value to the physician than to the patient. The spread of cancer cells through the lymphatics is a possibility. In taking a section, one should give the pathologist a chance by selecting a fair specimen of the growth and making an incision large enough to obtain a satisfactory section. Often on the surface of the lesion there is nothing but degeneration and debris and too often the pathologist is handed only a scraping or slice of epithelial debris. I would, however, hesitate before excising widely beyond the margins of the growth and opening the lympatic spaces unless I was prepared to excise and destroy the entire growth at the same time. Sometimes it is well to wait until a part of a series of x-ray or radium treatments has been given to a cancer before taking a biopsy; then you can remove a section from the surface with safety with a razor blade. By that time the cancer cells will have been devitalized. Also, the smaller and more superficial the biopsy, the better the cosmetic result.

In referring a patient to a radiologist for treatment of a growth one should avoid giving the patient definite information as to type and amount of treatment he requires; for instance, you should not tell the patient that he needs one radium treatment or that one x-ray treatment will cure the condition. This often puts the radiologist in an embarrassing position for, while he would like to be agreeable and while radium and x-ray act much alike, many of us have our own favorite means of attack which we use in certain types and locations.

In regard to the use of electro-coagulation, a popular practice is to use a shower of sparks on the surface. This chars the surface, but produces very little tissue change beyond a few centimeters in depth. It is a good procedure, when using surgical diathermy, to use local anesthesia. Be sure your patient will take what you should give and then, when you finish coagulating, remove the destroyed tissue with a curette and see if you are down to a normal layer. If it bleeds, you are not down to that layer and should coagulate deeper.

In treating lesions which have a considerable elevation there is some doubt as to whether x-ray or radium will have a devitalizing effect more than 1 cm. away from the surface. It is a popular custom to use interstitial radiation under the base of a rather thick lesion. Another way of treating such a lesion, which is very much less expensive to the patient, is to use electro-coagulation to destroy that part of the lesion which extends above the surface and curette this away. Usually they do not extend so deeply under the surface and by irradiating the base you have a very satisfactory combination of surgery and irradiation.

I am often asked when is the most favorable time to treat vascular nevi or hemangioma in babies. These lesions, especially the former, are said to disappear spontaneously at times, but they are more liable to become larger. They are more radiosensitive in younger stages and, consequently, the sooner the treatment the more rapid the response, the less irradiation, less expense to the mother and father, and the better the result.

E. N. Kime, M.D. (Indianapolis): Dr. Pierce is to be congratulated for bringing this subject before the general session because skin cancer in its early localized stage is a curable disease. Neoplasms of the skin are readily accessible and amenable to treatment by the indicated physical agency, either in the form of radiation, surgery or electrosurgery.

With reference to diagnosis and biopsy. Drs. Pierce and McClelland have correctly stressed the importance of correct diagnosis, and I am glad to note their endorsement as radiologists of the importance of microscopical control in the treatment of cancer. When we realize that accuracy of diagnosis in cancer is stepped up from sixty per cent efficient without biopsy to better than ninety per cent with microscopic examination, we may well mistrust the end results of anyone who claims to have cured a case of cancer, unless he has clinched the diagnosis by use of the microscope. Not infrequently in my private practice, and also in the Oncologic Clinic at the Indianapolis City Hospital, we have a different conception as to the nature of the lesion, the type and grade and probable extent of the growth, after having carefully studied the microscopic slides.

I agree with Dr. McClelland as to the danger of biopsy if carelessly performed by a cutting instrument, not preceded by radiation or followed by cauterization. Many small lesions of the type so beautifully illustrated by Dr. Pierce can be equally well managed by excision under local anesthesia, utilizing electrosurgery in the form of a very fine cutting current. Since the entire neoplasm is excised along with its tumor bed, the lesion is not only cured but may also be routinely studied microscopically. By such routine histologic study of lesions excised in toto, we may now verify the statement of McKee in the incidence of squamous cells found in clinically simple rodent ulcer. This occurs in approximately ten per cent of all cases which are clinically typical basal cell carcinomas, and may explain the paradoxical radioresistivity occasionally seen in these lesions.

Now let us consider briefly the topic of radiosensitivity. We agree with Drs. Pierce and McClelland that the problem of radiosensitivity should be considered in every malignant or potentially malignant neoplasm. Radiosensitivity may be defined as "that condition inherent in the neoplasm or in its tumor bed, which enables the growth to undergo regression after that amount of irradiation by radium or x-rays, which is insufficient to

damage the tissues of the host." Highly vascularized and highly malignant neoplasms are radiosensitive whereas the less anaplastic and fibrotic types are radioresistant. Whenever we are confronted with a neoplasm which has proved resistant to radium and x-rays, and which is low grade and localized, the modern technic of electrosurgical ablation is efficient and valuable. With Dr. Pierce, I also condemn indiscriminate fulguration, in fact would never employ it except for extremely superficial destructive effects. On the other hand, if the modern electrosurgical unit is correctly employed, the operator may perform fine dissections, or various degrees of endothermic dessication or coagulation under complete and delicately flexible control. Not infrequently the smaller neoplasms may be excised and cured, with resultant almost invisible scar.

The importance of teamwork in the diagnosis and management of precancerous as well as malignant lesions of the skin and accessible mucous membranes should be stressed. I would urge that in all cases, whenever at all feasible, microscopic examination be utilized whether radiation, surgery or electrosurgery, or any combination of these methods is employed.

ABSTRACT

PSYCHOLOGIC EFFECTS OF BENZEDRINE SULFATE

GUTTMANN, E., and SARGANT, W. *British Med. Jour.*, 1:1013 (May 15) 1937.

Observations were made on more than 250 patients receiving doses of 10-30 mg. of benzedrine sulfate (benzyl methyl carbinamine sulfate, S. K. F.).

With this dosage, effect upon blood pressure was limited although occasional fluctuations of 10-30 mm. were observed. No severe complications were encountered. Minor complaints of dizziness, tremor, etc., seemed to have a relationship to speed of absorption and the authors feel it inadvisable to administer benzedrine sulfate on an empty stomach.

General psychological stimulation was produced which was shown by increased confidence, initiative, talkativeness and activity. Thinking processes appeared to be speeded up without impairing concentration or judgment.

There was a wide variation in the response of individual patients. Normals exhibiting retardation, indecision and mild depression were generally benefited. Patients with cyclothymic tendencies had the most constant beneficial effects. Although patients suffering from mild depressions often were carried over periods of disability, severe depressions received little benefit. Some schizophrenics, particularly those with lack of initiative, seemed to benefit. Patients with narcoleptic symptoms received constant relief.

Benzedrine sulfate appeared to be contraindicated where anxiety was a prominent feature, although some patients of this type showed improvement. In general, hypochondriacs did not respond favorably, and with all subjects possible production of insomnia had to be considered. There did not seem to be any necessary relationship between psychological effects and blood pressure change.

No tendency to addiction was observed and the authors feel that the unpleasant reactions obtained with overdosage will be sufficient to assure the proper usage of the drug.

ACUTE RETROBULBAR NEURITIS*

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The term retrobulbar neuritis, in a comprehensive sense, designates an inflammation of any part of the afferent visual and light pathways from the lamina cribrosa along the nerves, chiasm and tracts to the lateral geniculate bodies. The disease is classified mainly as acute and chronic. Only the acute form will be considered here. It occurs in association with many infective and inflammatory diseases and with some drugs that act as poisons to susceptible persons.

The classical signs are (1) a visual field defect, usually a relative central scotoma of rapid onset unaccompanied by pain, (2) an eyeground in which no pathology is evident in early stages, except that the disk is mildly edematous in patients where the lesion is located immediately posterior to the lamina cribrosa and (3) a marked tendency to spontaneous recovery.

The leading and most diagnostic symptom is a scotoma that is central, pericentral, paracentral or elsewhere in the field; it may be relative or absolute but is seldom positive. The defect in sight is sometimes discovered in the morning when the patient awakes; sleeping postures have been brought to notice to explain this. Vision is keener at dusk than in day time because brilliant illumination is irritating to the nerve and it will not transmit visual impulses at their normal value in bright light. Sight is better when looking slightly to one side (usually the nasal) of the object of gaze where the axial bundles are the ones solely or predominantly affected. Form and light sense are reduced and may disappear for a time. The peripheral field is contracted in some instances. In inflammatory or fulminant cases pain in the temple or orbit is increased by backward pressure on the globe and by ocular rotations; this sign is suggestive of disease of the orbit or sinuses.

Less common symptoms that may develop during the course of the disease are: Pupillary reactions sluggish or temporarily abolished; waxy pallor of the disk without loss of tissue where there is pressure on the chiasm; other disk changes such as temporal pallor, choking or atrophy; dilated and dark retinal veins; distortion or absence of the foveolar reflex; a mottled appearance of the macular region without any yellow color when viewed by red-free light; enlargement of the blind spot and disturbances of the olfactory function.

Retrobulbar neuritis has been reported without visual defects, and other cases are on record where nothing but a central scotoma could be demonstrated. The disease is usually unilateral; when bilateral it is most unusual for the two eyes to be equally affected at the same time.

* Presented before the Section on Ophthalmology and Otolaryngology of the Indiana State Medical Association at the annual session in French Lick, October 5, 1937.

The optic pathway is anatomically divided into intrascleral, intraorbital, intracanalicular and intracranial portions. The intraorbital portion lies within the muscle cone, is imbedded in fat and is in relation with blood vessels, mainly the central artery of the retina, nerves and spaces for lymph. The posterior part of it lies within the tubular ligament from which the extraocular muscles arise. The intracanalicular portion is in close relation with the periostium that lines the bony canal and with the ophthalmic artery; it is also in relation with the posterior groups of paranasal sinuses.

The intracranial portion is subdivided into the nerves, chiasm and tracts. Here the relations vary with the individual. The nerve has contact with the ophthalmic artery and often the internal carotid. It may be very near to or remote from any paranasal sinus. The chiasm lies above and behind the posterior cells and may be in contact with their walls. The internal carotid arteries lie in the lateral angles of the chiasm and the circle of Willis practically surrounds it. Congenital anomalies in these vessels, aneurysms and atheroma can produce pressure. The stalk of the infundibulum adjoins and may pass through the chiasm; an internal hydrocephalus can produce pressure. The optic tracts terminate in the lateral geniculate bodies after passing through the great cistern where they are continuously bathed in cerebrospinal fluid and whatever toxic substances it may contain. Some of the intracranial optic nerve components will be in relation with the olfactory pathways, a relation that helps to explain the disturbances of smell met with in occasional cases.

The coverings of the pathways vary in their several parts. The intraorbital and intracanalicular portions are inclosed in pia, arachnoid and dura. The intracranial portion has no dura, but is invested with pia and arachnoid which become thickly matted in inflammatory conditions in that vicinity. The pia gives off fibers which support the fine nutritive blood vessels that enter the substance of the nerves, chiasm and tracts, but these membranes are gradually lost as the lateral geniculate bodies are approached.

The important bony relations of the intraorbital portion are the roof of the maxillary and the floor of the frontal sinuses and the lateral walls of the ethmoid cells. Those of the intracanalicular portion are the walls of the posterior ethmoid and sphenoid cells. The intracranial portion is near to or touches the roof of a sphenoid cell and sometimes passes through it bare or with a membranous or bony covering.

The regional anatomy offers so many tempting potentialities that the examiner naturally looks to these sources before considering less conspicuous etiologic opportunities.

Many speculations have been proposed to explain the phenomena of retrobulbar neuritis. There must needs be some way of accounting for a scotoma in the visual field when nothing wrong is seen in the fundus. Whatever background of pathology exists, it must be in harmony with the strong tendency toward spontaneous recovery. The processes that can affect the nerve tissue are (1) pressure, (2) vascular disturbances and (3) inflammations of the nerve itself.

Pressure is applied from without by a new growth, by increase in volume of the tissues which normally surround the nerve and by dropsy within the sheath that compresses the nerve trunk. Pressure from within is effected by a swelling of the nerve bundles that expands the trunk against the inelastic dura or the bony optic canal.

Small vessels penetrate the substance of the nerve by way of the septal network; when these supply insufficient nutriment to any part, that part cannot perform its functions. When too much blood is supplied there is congestion, blood stasis and pressure from which inhibition of function results. Hemorrhages occur within the nerve or infiltrate it and affect its functions adversely. These vessels also afford lodgment for septic emboli.

Inflammations of the nerve arise in consequence of blood and lymph borne bacteria or their toxins, which are therefore secondary in the nerve; septic emboli from distant sources start a new focus of inflammation. The free anastomoses of valveless veins in the orbit and vicinity are favorable to invasions of exciting material. The orbit does not contain definite lymph vessels, but there are lymph spaces in the walls of its blood vessels. Lymph borne material can reach the orbit from any source above the larynx.

Acute retrobulbar neuritis has been noted more frequently with multiple sclerosis and sinusitis and less frequently with infectious diseases such as influenza, rheumatism, erysipelas and meningoencephalitis; focal infections as from teeth and tonsils; intoxications, toxemias as in pregnancy, tuberculosis, syphilis and arteriosclerosis; metabolic diseases as diabetes and pernicious anemia; intracranial tumors; severe hemorrhages and poisoning by methyl alcohol, quinine, ergot and other substances.

Not all of these factors, severally considered, can be individually, primarily and solely responsible for the production of retrobulbar neuritis. Some of them, as intracranial tumors, are present with other conditions that are overlooked or not sufficiently evaluated in the etiologic diagnosis; some are secondary to a disease that is no longer present, as when influenza has infected a sinus and then disappeared. Other diseases, like diabetes, weaken resistance to infection. Allergy is a likely factor in some instances.

The discussion will be limited to multiple sclerosis and sinusitis, which are apparently the principal associates of the nerve disease, and to their differential characteristics in the study of retrobulbar neuritis, where diagnostic ability is often severely taxed.

Multiple sclerosis is characterized by a central nervous system that has scattered over it typical sclerotic plaques which are thought to be products of inflammation. They affect the optic nerve and give rise to a kind of optic neuritis. Patches of the myelin sheaths of the fibers are destroyed and reparative neurogliar tissue is proliferated. Not all axis cylinders are affected at the same time or to the same degree.

The principal symptoms that are to be expected during the course of the disease are diminished vision, oculomotor paralysis, scanning speech, impaired reflexes and intention tremor. Visual defects appear suddenly and subside without undue delay, but recurrences appear most persistently. The disease is extremely chronic; its results vary from recovery to severe optic atrophy and other permanent defects.

Scotomas often occur in groups in multiple sclerosis and they tend to wander or migrate. A group may be found in one part of the field now, but after a few months is found with but little change in another part. Such scotomas may be central, pericentral, or paracentral; they are habitually located within twenty-five degrees of the center of the field. The observation of wandering and migrating is consistent with the conception that older myelin lesions are undergoing repair while others are in process of formation.

By way of contrast, the central scotoma of sinusitis does not change position in the field. It is associated with an enlarged blind spot; both increase in size while the disease progresses and diminish as recovery is accomplished.

Retrobulbar neuritis may be present as a part of multiple sclerosis for some months or even years before other signs of the latter appear; in fact, it has been known to disappear after treatment of sinusitis or other suspected cause, and multiple sclerosis be found later to have been probably responsible. The spinal fluid cell count and colloidal gold curve reading are recommended procedures in diagnosis.

Sinusitis has a possible etiologic relationship to retrobulbar neuritis that needs careful study in each case. There are several anatomic intimacies between sinuses and the orbit, optic canal, nerve, chiasm and tract. Separating bony walls are thin and often contain a dehiscence or hiatus through which direct extension of infection can occur. Fine vascular channels perforate the bony partitions; valveless veins anastomose freely in this region and facilitate a movement of blood in any direction.

An inflammatory process in a sinus can extend and produce disease of the eye, the optic nerve or the orbit. Such extension could be accounted for principally by thrombophlebitis, lymphangitis or bone necrosis. A septic thrombus that lodges in any small vessel forms a new focus or site of infection. Lymph spaces provide for the migration of bacteria and their toxins to a new site. Bone necrosis causes direct extension to contiguous tissues.

Available literature suggests that influenza is responsible for more sinus infections than any other one cause. It is probable that sinusitis is practically always secondary to some other infection, such as the invasion of an antrum by organisms or toxins from the diseased root or process of a tooth. The eye tissues, more particularly but not solely the uveal tract, seem to be peculiarly sensitive to secondary infections; that is, bacteria in the primary focus sensitize eye tissues to toxins that will be generated in the secondary focus. Allergy may be important; some persons sometimes apparently become allergic to their infections.

A diagnosis of sinusitis is made by customary methods. The hyperplastic type is found more frequently than the purulent with retrobulbar neuritis. Suppuration is not essential to transmission of the disease. Where there is a purulent secretion the affected mucosa has a thickened basement membrane over an intact bone, a provision that makes transmission difficult.

The patient who has retrobulbar neuritis and sinusitis presents a problem concerning surgical versus non-surgical treatment. Proponents of early operation in this combination can point to many reports of relief following intranasal surgery. Opponents can point to just as many where relief was spontaneous or followed non-surgical treatment.

Comparisons are odious but sometimes pertinent. For instance, retrobulbar neuritis has promptly disappeared after an induced abortion. Surgical abortion is attended by complex factors. The intrapelvic tissues undergo physical and chemical changes in consequence of mechanical irritation; the products are absorbed and give rise to a kind of anaphylaxis; hemorrhage with absorption of blood elements has the effect of autovaccination; the endocrine system is disturbed; some allergic reaction may be present and there is some shock to the nervous system. As far as retrobulbar neuritis is concerned there do not seem to be important differences between therapeutic effects of induced abortion and those of intranasal surgery; one procedure should be accorded as careful consideration as the other.

There are some perplexing, inconsistent and unreconciled facts to bear in mind about the relationship of retrobulbar neuritis and sinusistis. Not all patients who have one have also the other; a patient may have both with multiple sclerosis added. Children are prone to have attacks of sinusitis, but rarely of retrobulbar neuritis; it may be significant that their optic canals are relatively large. Sinus surgery does not always relieve. A sinusitis may not be recognized until a necropsy is performed.

For diagnostic purposes a detailed history is important, especially regarding attacks of influenza. Examinations should be made of the eyes, ears, nose, throat, nervous system and the general physical condition. Laboratory studies ought to be made, particularly of the spinal fluid for cell count, colloidal gold curve and syphilis. Pending a defi-

nite diagnosis and the development of new evidence the patient can be started on nonsurgical therapy.

Treatment of retrobulbar neuritis requires vasodilatation. The following measures are recommended: Hot compresses, diaphoresis, amyl nitrate by inhalation, sodium nitrate intravenously, atropine sulphate intraorbitally or subcutaneously, and pilocarpine, eserine and dionin locally to the affected eye. Parenteral administration of foreign proteins, such as typhoid vaccine, tend to increase peripheral circulation. Malarial inoculation or fever therapy is indicated if the patient has syphilis. Sodium salicylate may be given in large doses. Leukocytic extract has been advised. The correction of allergic conditions and the building up of immunity should be attempted. Iodides are indicated later.

It has been asserted that scotomas due to vascular derangements in the anterior parts of the pathways will yield to the induction of nasal anesthesia, but if the pathology is posterior there is no such effect. So, the relief of vasomotor spasm is evidently important in some cases.

Much has been said and written about closed ostia obstructing ventilation and drainage, and about negative pressure in a sinus. The late consensus favors the idea that relief does not come from restored ventilation or drainage or from the correction of negative pressure, but because of the hyperemia induced in nasal membranes by various kinds of treatment. By hyperemia we understand that the vessels are engorged with blood that is circulating at a diminished rate, but without more serious change than thickening of affected tissues.

Hyperemia may be induced by chemical or physical means. Painting the nares with two per cent iodine or simple packing of the nares for several hours daily may suffice. Packing for from three to five hours daily may be done with cocaine and epinephrine, or with ten per cent argyrol in equal parts of glycerin and water. Many cases have recovered after the use of one of these measures. Concurrently, parenteral protein therapy and other remedies can be employed.

In conclusion, the points to be emphasized are the advantages of a carefully prepared history, complete examinations, repeated checking of the visual functions, and an attempt to relieve the neuritis with conservative treatment. Whenever surgical measures seem to be indicated, let them be promptly, boldly and thoroughly done, but with no unnecessary sacrifice of tissue or structure.

23 East Ohio Street.

DISCUSSION

Martha Lyon, M.D. (South Bend): Doctor Rutherford outlines the pathway of retrobulbar neuritis from the lamina cribrosa to the geniculate bodies; he gives the cardinal signs, the early symptoms which are dependent mostly on the scotoma, and the later symptoms with the eye ground findings as the disease develops. The anatomical description of the optic pathway giving the relations to the various structures, bones, vessels, sinuses, glands and its coverings in the various locations is clear and complete.

In a very comprehensive manner the processes affecting the nerve tissue, as pressure, vascular disturbances, inflammations and infections borne by blood and lymph, have been discussed.

As examples of acute retrobulbar neuritis Doctor Rutherford has confined himself to those diseases in which it is most frequently seen, as in multiple sclerosis and sinusitis, although there are acute stages in many other diseases in which retrobulbar neuritis may become chronic. It is to be hoped that Doctor Rutherford will later present his cases of multiple sclerosis with the early characteristic fields showing the scotomas, the later fields with improvement under treatment, and the final fields as the disease progresses toward atrophy.

May I call your attention to the chapter on retrobulbar neuritis in Manuel Uribe Troncoso's recently published book (1937). Doctor Troncoso stresses two anatomic features of the orbital and cranial part of the optic pathway: (1) The presence of the papillomacular bundle, and (2) The existence of myelin sheaths around the axis cylinders beyond the lamina cribrosa.

The fibers of the papillomacular bundle begin in the cones of the macular region, take an elliptical course to the temporal side of disc forming behind the eye a temporal sector with apex toward centre of nerve, and later run in the axis of the trunk occupying one-third of the thickness of the whole nerve with fibers finer than the peripheral ones, and hence more susceptible to the influence of toxins from infections and to poisons. They may become inflamed without involving the peripheral fibers.

Troncoso has classified retrobulbar neuritis under four heads:

I. Axial neuritis.
II. Demyelinating optic neuritis.
III. Chronic axial neuritis (toxic amblyopia).
IV. Hereditary atrophy of the optic nerve (Leber's disease).

I. Under axial neuritis are included the infection which starts in the nerve itself, brought on by the blood, or propagated from the surrounding tissues; also the acute infections, as influenza, pneumonia, varicella, erysipelas, scarlet fever; also from nose and sinuses, teeth and tonsils.

II. The demyelinating optic neuritides include:
1. Multiple sclerosis.
2. Acute disseminated encephalomyelitis.
3. Neuromyelitis optica (Devic's disease).
4. Diffuse periaxial encephalitis (Schilder's disease).

The optic neuritides have only recently been associated with demyelinating diseases of the nervous system, and a firm etiologic and pathologic ground is still missing; but by some it has been thought to be variations of one main pathological condition. Troncoso has stressed the time of the appearance of the retrobulbar neuritis in each of these

diseases with the early scotoma and the later fundus findings as the disease progresses from the acute to the chronic condition.

III. Under chronic axial neuritis are placed alcohol and tobacco amblyopias and also the scotomas from the diabetic toxins, to all of which the papillomacular bundle is particularly susceptible.

IV. Finally, hereditary atrophy of the optic nerve, or Leber's disease, is classed as a chronic retrobulbar neuritis limited to the papillomacular bundle.

With this newer classification and Doctor Rutherford's excellent paper we should be able the more easily to understand this difficult subject and perhaps prevent some of the reduction in vision which results from this disease complex.

THREE-YEAR STUDY OF STUDENT NURSES, 1935-1937*

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The Marion County Tuberculosis Association has completed a three-year study of the students in the Indianapolis Training Schools for Nurses in co-operation with the management of the schools, to ascertain, by means of the tuberculin test, what per cent of the nurses acquire the infection during the time spent in the training schools.

The tuberculosis associations have been teaching that "Every case of tuberculosis comes from another" and that in order to reduce the morbidity and mortality from tuberculosis we must know where this case is and prevent others from contacting the infected person. And today the very people who should know best how to avoid infection are the ones who seem to suffer most from it, namely, the student nurse, the graduate nurse and the interne working in hospitals where the routine and technique of that institution should be such that those serving patients would not contract disease.

Nurses live under good hygienic conditions, eat well-balanced meals and are constantly under medical supervision and yet every year there is a large number of nurses who break down with tuberculosis. From 1928 to 1932, inclusive, there were twenty graduate nurses taking treatment in Sunnyside Sanatorium and more than that number of student nurses. There were five nurses from one training school in the sanatorium at one time. The question is, why and how do these nurses get this infection? Do they have it when they enter the school or do they acquire it there?

Early in 1935 this study was started. Each nurse whose reaction was negative to the first test was given a second test in 1936, and in 1937 the 1936 negative reactors were given a third test. In other words, each nurse was followed during her entire stay in the school to determine the percentage of those who entered as negatives to the test and became positive in the course of their training.

These tests have been given by the physicians connected with the training schools. The Tuberculosis Association furnished the tuberculin, records, needles, nurse to assist, etc.

There has been much discussion among medical and nursing groups in general hospitals as to how nurses acquire this infection. A possible source of infection is the patient who is admitted to the hospital under a diagnosis of nervous breakdown, surgery, maternity, etc., but whose chart fails to show it is also an open case of tuberculosis.

When the first test was made in 1935, 574 student nurses were tested, including the preliminary, junior and senior students. Of this number, 329, or 57.3% of the group, were positive, 237 negative, and 8 not read, due to absence.

Of the 237 negatives to the first test, 63 had graduated, left training or were absent for various reasons when the second test was made in 1936, leaving 174 students for further study.

Of this 174 given the second test in 1936, 54, or 31%, were positive, having acquired the infection since the first test.

Of the 120 negative to the second test, 36 graduated before the third test, leaving 84 to be tested. Of this 84, 17, or 20.2%, were positive to the third test made in 1937, having acquired the infection since the second test was made.

Of the 174 students negative to the first test, *71 students*, or *40.8%*, had acquired the infection before they left the training school.

Of this total group of 574 student nurses first tested in 1935, 400, or 69.6%, had positive reactions either to the first test or later tests made before they left the training school.

This cannot be a complete report as there is no way of knowing how many of the students who had a positive reaction to their first test in 1935 had acquired the infection during their training, as this first test included the preliminary, junior and senior students, but it does show far too high a per cent of student nurses acquiring tuberculosis infection during their training in comparison with the same age group under different environment.

Compare the results of this study with those of a similar one made by Dr. J. Arthur Myers, of the School of Medicine of the University of Minnesota. This was a study on 224 students on entrance to the School of Education carried on for four years—each year all who continued to react negatively were retested. As freshmen, 22.8% were positive; as sophomores, 24.1%; as juniors,

* This report was submitted at the annual meeting of the Indiana State Nurses Association, held in Terre Haute, Indiana, October 12, 1937.

* Indianapolis Schools of Nursing.

25.9%, and as seniors, 27.2% were positive. Thus, there was an increase of only 4.4% positive reactors throughout the four-year course. This would indicate that the campus of the University of Minnesota has become a fairly safe place for students as far as contamination from tuberculosis is concerned—in fact, a much safer place than a hospital.

Another comparison is with a group of 500 at the Indiana Central College which included boys and girls and some of the faculty members. This group was tested in 1935 and 45% had a positive reaction. Many of this group were about the same age as the nurses, but it also included older students as well as faculty members.

RESULTS OF TUBERCULIN TESTING OF STUDENT NURSES
Indianapolis, Indiana, Training Schools

1935-36-37 — Three-Year Study by the Marion County Tuberculosis Association

Number student nurses given the tuberculin test in 1935	574
Number not read because of illness or absence	8
Number positive (57.3% of total group)	329
Number negative	237

Of the 237 negative to the 1935 test, 63 had graduated, left training or were absent for various reasons when the second test was made in 1936.

Of the remaining 174, when the second test was made in 1936, 54, or 31%, were positive.

Of the 120 negative to second test, 36 graduated before third test, leaving 84 to be tested in 1937. Of this 84, 17, or *20.2%*, were positive to third test in 1937.

Of the 174 negatives from first test—the group remaining for further study—71 students, or *40.8%*, showed a positive reaction to the later tests in 1936 and 1937.

Of the total group of 574 student nurses first tested in 1935, 400 were positive either to first test or later tests made during the three-year study. This is *69.6%* of the total group.

ABSTRACTS

THE NEW YORK CITY PLAN FOR COMBATING SYPHILIS

There are in New York City almost 14,000 licensed practitioners of medicine. Charles Walter Clarke, New York (*Journal A. M. A.*, Sept. 25, 1937), maintains that these physicians constitute the shock groups in the city's battle against syphilis, more valuable than all the many clinics and hospitals, voluntary and official, in the city. Therefore the immediate objective of the New York City Department of Health is to aid private physicians in discovering, treating and controlling syphilis among patients who go or could go to private practitioners. The practical aids which the Department of Health offers may be briefly described are diagnostic, treatment and epidemiologic services, educational activities and the reporting of syphilis. The fifty clinics of voluntary hospitals in New York City should play a more important part in the fight against syphilis. Many of these clinics are willing and able to provide treatment without charge for a larger number of poverty stricken patients if drugs are supplied by the Department of Health. To clinics which charge only low fees—fees that cannot possibly compete with those of private physicians —the Department of Health now provides drugs to enable them to care for indigent syphilitic patients. The sanitary code regulates the conduct of these clinics and requires the maintenance of certain standards, including adequate personnel for the follow up of cases. After clinics have exhausted their resources in endeavoring to return lapsed infectious cases to treatment or to bring sources of infection under control, the Department of Health employs its legal authority to seek out such uncooperatitve individuals and bring them under medical care. The provision of treatment for syphilis in indigents and others who cannot pay, whether this treatment is ambulatory or impatient, is primarily the function of the various tax supported hospitals of the city. The relation of the health authority to the city hospital clinics is defined by the provision of the state law and of the sanitary code. The Department of Health has primarily the duty of promoting, directing and aiding the attack on syphilis as a communicable disease. As a matter of sound policy it may work through other agencies both official and voluntary to gain its ends. It must supply deficiencies. No permanent service of the Department of Health is more important than that of instruction of the public with regard to syphilis. An encouraging start has been made especially in cooperation with the liberal press of New York City, the radio and numerous voluntary societies. In addition to budgetary funds, the Department of Health cooperates with the WPA in a project for the diagnosis and treatment of syphilis and gonorrhea. During 1935, 13,711 individual patients were given treatment in the city's clinics. During 1936 the number was 19,808, an increase of 44 per cent. During the same period there was an increase of 41 per cent in the number of cases of shyphilis and of 25 per cent in the number of cases of gonorrhea under treatment by all sources in New York City. The author believes that a start in the right direction has been made and that with the cooperation of all colleagues in pprivate ppractice and in hospitals a radical reduction in the prevalence of syphilis and in the disasters which it causes shall ensure if the present plan is perservered in.

DERMATITIS FROM SULFANILAMIDE

Louis J. Frank, Sioux City, Iowa (*Journal A. M. A.*, Sept. 25, 1937), speaks of two cases of dermatologic manifestation in which the factor of sunlight was a striking clinical observation. In both cases the dermatitis appeared only after exposure to sunlight. After full development, the dermatitis was not confined to the exposed parts, but the more severe involvement and intense edema was localized in these areas. It is known that a mild erythema resulting from the sun or other sources can hasten the appearance and, for a time localize many dermatologic conditions, including such infections as syphilis and smallpox. As an alternative, the author offers the suggestion that heliosensitivity created by the drug or some of its chemical reactions with hemoglobin may play a part in this type of toxic reaction. Tihs would help account for the infrequency of this type of toxic manifestation in the numerous cases reported in the American literature in which sulfanilamide therapy is being employed, because the patients have been predominantly hospitalized. Whether or not this is just a chance observation will be borne out when more cases are reported and studied.

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DECEMBER, 1937

EDITORIALS

TIME FOR ACTION!

Disasters such as burning theaters, sinking steamers, collapsing buildings carry with them death tolls that horrify headline readers. Seventy people wiped out at one time! Wholly preventable if proper authorities had made investigation *before* the disasters occurred, but investigations are made afterward, and then steps are taken to see that such events do not recur. This thought is occasioned by the recent widespread death list resulting from the sale of a deadly mixture sent out by a southern pharmaceutical concern. The mixture was marketed as "Elixir of Sulfanilamide," and contained as its chief remedial agent the drug chemically known as para-amino benzene sulfanilamide, but the sulfanilamide had nothing to do with the numerous deaths. The solvent, diethylene glycol, administered in doses comparable to that recommended by the manufacturer, acts as a cumulative poison, and the terminal symptom in all instances was anuria. Diethylene glycol is used rather extensively in the manufacturing industry, but it has not heretofore been used in the preparation of drugs in this manner; analysis of the mixture shows that it contained 72% of diethylene glycol by volume.

These seventy deaths were unnecessary because they were preventable. Sometimes such catastrophes are necessary before the public can be shaken from a lethargic attitude toward problems that require attention. In the wake of this disaster may come the proper action on the part of Congress in enacting legislation that will make such events wholly impossible. Numerous attempts to procure legislation that will govern the manufacture, advertising and sale of drugs and pharmaceutical preparations have been made, but all have met the same fate—the bills died in committee or they were all but emasculated. Massengill's Elixir of Sulfanilamide is not the only offender in recent years, but it was the cause of so many deaths within such a short space of time that it was brought to the front-page attention of the public and radio comments included warnings against the use of the drug. Within the past few years dinitrophenol came into medical prominence and within a short time proprietary preparations were marketed as reducing agents. Reduce they did, but at what cost to the consumer! Death was no stranger in the list of casualties, and cataract formation was a common result.

Sulfanilamide still is a new medicament; it is in the experimental stage, and numerous reports in the medical press indicate that it is not without danger. Why, then, should those not engaged in the practice of medicine undertake and be allowed to market such preparations wholly without knowledge of or consideration for the possible results of their use? There is no adequate legislation at present. If the manufacturer of this Elixir of Sulfanilamide had not misbranded his product, the Federal Food and Drug Administration would have had no authority to trace and seize shipments of the preparation responsible for the deaths. Obviously, the sale of highly potent drugs to persons who take them without proper medical supervision should be controlled. Meanwhile, let every physician bear in mind that this Elixir of Sulfanilamide was in some instances prescribed by physicians who could have sidestepped their part in this disaster very simply—by refusing to use or prescribe preparations which have not been accepted by the Council on Pharmacy and Chemistry of the American Medical Association.

The public is aroused and it looks to the medical profession as the guardian of the public health to sponsor needed legislation. It is time for action!

THE NEW HEALTH OFFICER SET-UP

Comparatively few of our members are aware of a rather radical change in the laws governing the matter of county health officers. The change will be effective January 1, 1938, in accordance with an Act of the 1935 legislature. In the present discussion, it should be borne in mind that city health officers are not affected until January 1, 1939, and that the present discussion, therefore, refers specifically to county and town health officers.

Under the terms of the Act, the office of town health officer is abolished and the duties heretofore performed by these officials will be taken over by the county health officers, these offices to be filled by appointment for four years on next

January 1. One feature of the new law that will meet with general approval from the medical profession is that all county health officers must be regularly licensed *physicians* "legally qualified to practice medicine and suitably trained in sanitary science."

Another change concerns the salary of these officials. Under the old law, they were paid on a per capita basis of 1½ cents; under the new law, this is raised to three cents, with the provision that no county officer shall receive an annual salary of less than two hundred dollars nor more than eighteen hundred dollars. This per capita payment does not include the population of cities which have separate health officers. There is nothing in the law to prevent a city health officer from serving as county health officer and drawing the two salaries for such services save that his total salary shall not exceed the eighteen hundred dollars. Furthermore, the jurisdiction of a county health officer is limited to the population upon which he is being paid and this means that cities of the second, third, fourth, and fifth classes are without his jurisdiction. The county health officers will keep all records that have heretofore been kept by town health officers.

The preceding information has been received from an official of the Indiana State Board of Health who takes occasion to comment on some of the phases of the new set-up. He is of the opinion that such officials should be members of the local county society since "matters frequently come up for solution by the county health officer in which he has an opportunity to interpret to the public the recommendations of the medical society." A further comment seems to us a very important one: "It is important, particularly at this time when there is so much loose talk about the socialization of medicine, that any member of the profession holding public office be fully acquainted with what his colleagues in the organized society are thinking and feeling." The sentiments expressed are agreeable to us. There is no reason why a county health officer, or a city health officer for that matter, should not be an *active* member of his county medical society, for only in that way can he know what is going on in his local profession. Further, we are of the very firm opinion that a health officer who consistently ignores his confreres, rather choosing to do this or that solely because *he* is satisfied that it is the thing that should be done, makes a poor health officer.

One thing that distinctly appeals to us is the provision that, according to the law, all health officers must be *regularly licensed physicians, legally qualified to practice medicine.* In too many sections of our fair state we have occasionally had cultists—yes, even laymen—holding these important offices which, if properly handled, have to do with the very vital element of public health. It seems that this becomes a thing of the past on January first.

Whether or not we approve of the law in its entirety is not the present question. It is now the law, and it will be enforced. Now it becomes the duty of the medical profession of Indiana to see to it that these appointments are made in accordance with the law and every endeavor should be made to have none but active members of our county medical societies hold these important posts. Too long have we sat by and registered no complaints about the many evils attendant upon the former laws; now the opportunity presents itself for us to correct those evils, and we must act.

OUR MEDICAL COLLEGE

Only a few decades ago, medical colleges were quite numerous in Indiana as well as in other populous sections of the country; they represented each of the one-time schools of practice—the allopaths, physio-medicals, eclectics and what not. Even in those days, leaders in the field of medicine were quite in accord with the belief that at some future day we must have fewer and better medical schools and that the various "pathies" would cease to be. That time arrived; the "regular" schools were combined, the others faded from the picture.

The American Medical Association played an important part through this era, principally through its Council on Hospitals and Medical Education. We well remember the furore occasioned by the report of the Council at the time it published the first classification of medical schools. Commendations and calumny were heaped upon the Council because of its bold stand, and in certain quarters it was freely and confidently predicted that the Council had quite overdone itself, and wandered far from its charted course. Only a few years later did the wisdom of the Council become generally accepted; the weaker schools either combined or closed; Council inspections, once grudgingly granted and even denied, were sought and in time most medical schools acquiesced in practically all Council recommendations.

As time went on, medical education in America was builded on the firmest of foundations, and today our system is excelled in no other country. Whereas only a few years ago it was deemed necessary to go to foreign countries for the "polishing" of one's medical education, now we go to some one of the numerous medical centers of America, there to take advantage of a medical progress the like of which is not met elsewhere.

We are in thorough agreement with the recommendations of the Council in all their pronouncements regarding both hospitals and medical schools; we believe these are given only after due and diligent study of the problems presented and believe the organized medical profession will do well to give ear.

For some time past, rumors have been rife in Indiana medical circles that the Council looked with

disfavor upon certain phases of the present set-up in the Indiana University School of Medicine; that perhaps certain departments might be improved and that the plan of giving the first year at Bloomington, the final years at Indianapolis, did not lend itself to the best interests of the students.

At the recent French Lick convention, Dr. E. D. Clark, in his presidential address before the opening general session, frankly discussed the matter and made the declaration that he had been unable to receive permission from the school authorities to have access to the findings of the A. M. A. Committee on Medical Education and Hospitals. He made the recommendation that a committee be appointed to investigate the matter. The reference committee of the House of Delegates gave a favorable report on this recommendation, which report was unanimously adopted by the House. The committee has been duly appointed.

The Journal is vitally interested in this matter, as is every physician in Indiana. That we have a *good* medical school does not permit of argument; and, having a good school, it becomes our duty to keep it in the front rank. Few medical schools in the country have as many teaching beds as does our school nor are we second in the matter of a teaching staff.

If the Council on Hospitals and Medical Education has made certain recommendations as to matters that are necessary to maintain our present standards there, it is high time that something be done about it. While we have every confidence in our University authorities and in those actively in charge of the medical school, we believe the facts should be placed before the members of the Indiana State Medical Association. We are all interested in our medical school; to a great majority of us it is our alma mater; we have the utmost faith in the ability of the committee appointed to study the situation and trust that every opportunity will be given them to make a factual study of the entire matter and that their final report will clarify for all time what might become an embarrassing situation.

MARRIAGE LICENSE RACKET

Marriage, the ritual tells us, is an institution ordained of God. Presumably, therefore, it is a sacred thing, something that should be entered into after due deliberation, something that is more or less permanent. The idea of permanency, if one may judge by the appalling increase in divorces and the utter ease with which these instruments are obtained, long since has been dispelled. However, our present interest is centered in the marriage license, that little piece of paper obtainable from the local clerk of the circuit court.

Gretna Greens, those Edens to which lovelorn couples flock when occasions arise to prevent them from obtaining the desired marriage license in their home communities, have existed almost as long as history. Indiana has been the home of several such spots, notably in those sections immediately adjacent to neighboring states in which legal requirements are more or less obnoxious to the pair. Clark and Lake counties have long ago acquired undesirable notoriety in this regard because of their geographical locations. Lake county, next door to Cook county and Chicago, naturally does a larger marriage license "business" than Clark county, though from personal observations and inquiries the belief is substantiated that the stench is equally bad from either section.

The thing has gone on for a long time. Couples from neighboring states flock into Indiana border counties and, apparently without let or hindrance, procure the necessary papers, betake themselves to the nearest "squire" (usually by a very grave error called a "justice of the peace"), and are joined in the holy bonds of matrimony. Prior to the enactment of the Illinois law requiring applicants for a marriage license to present a certificate of health (this certificate presumably is given only after a test for the presence of syphilis) conditions in the two counties mentioned were more than deplorable. Gin marriages may not have predominated, but they were sufficiently common to attract more than ordinary attention. Recently within less than a month there were filed in the Chicago courts three separate annulment suits, each setting forth that the complainant had been married in Lake county, Indiana, and at the time was so under the influence of liquor that he or she knew naught of what was going on. In that county (Lake) the thing finally has been organized, and since the passage of the law before mentioned in the State of Illinois, the organization in the clerk's office has been carrying on in machine-like fashion. In addition to the legal fee of two dollars, the high pressure salesmen usually manage to sell the contracting parties a "certificate," the additional charge for which is a minimum of $2.50. This, of course, goes into the pockets of the clerk. An extra fee is charged if the request for a license is made after regular hours, and the fee varies with the time of the night, reaching as much as ten dollars for a license issued around midnight. The clerk pockets this extra ten! It is commonly believed that the interest manifested by attaches of the clerk's office in getting couples to the proper justice of the peace results in some sort of a split, although there is no definite evidence on that point. It is known, however, that the race for nomination and election to the office of justice of the peace in Center township, Lake county, is a hot proposition.

Somewhere the law says that a regularly ordained minister may perform marriage ceremonies, so a former squire, losing out in the election, organized a new church, had himself duly ordained as the minister of the outfit, and was all set to carry on his part of the racket. One enterprising squire, evidently not in the good graces of the controlling powers, set himself up with a combination filling station and marriage parlor, just out of

Crown Point on the main highway from Chicago.

So much for our case in calling this thing a racket—a racket that, according to local newspapers, brings a net income to the clerk of $75,000 per year.

What of the health aspects of this matter? What of the evasion of a perfectly proper law enacted by our neighboring State of Illinois? The increase in applicants from that state, since the passage of this law, has been astounding. No effort is made to deny that this increase is due to the fact that Indiana will and does issue marriage licenses to all comers, in certain of our counties.

The Lake County Medical Society, at its October meeting, unanimously endorsed a resolution calling upon Indiana authorities to stop this wholly indecent thing and to enact legislation that will surround the institution of marriage with such safeguards that will insure at least some degree of sanctity. Why should Indiana permit marriages of those from foreign states when it is known that the very great majority of those applying for Indiana licenses do so because they fear the results of a physical examination? Every clear thinking physician in Indiana will join with the Lake County Medical Society in this demand.

Indiana marriages should be put on a clean, healthful, decent, orderly basis. It can be done only by putting an effective barrier to gin marriages and those which are effected in spite of wholly proper laws in the states from which the law evaders come.

EDITORIAL NOTES

Merry Christmas

Your secretary has received dues receipt books for 1938. Why not get your receipt now?

December is here, the month when most county medical societies hold annual elections. We would again remind you that these elections are very important things. Your official family must be composed of men who have the interests of the profession at heart. Many of the crises of the past few years have successfully been met, yet there remain problems that must be solved—problems of very great importance to every physician. Particular care should be given the selection of delegates to the annual convention—be sure that the delegate will attend. At French Lick we were unusually fortunate in having a great majority of the regularly elected delegates in attendance upon both sessions of the House of Delegates.

We take our hats off to the modern hospital laboratory. After a four-day residence in a modern hospital, during which time we had about every laboratory examination known to medical science, we have arrived at the definite conclusion that the much discussed man of fifty should have a regular and systematic check each two or three years. It is the best life insurance that we know of. It is amazing, however, how much blood and urine are necessary in the course of these tests; one is both exsanguinated and dehydrated once the program is completed.

Radio broadcasts of the American Medical Association were resumed on October thirteenth. These programs formerly were devoted to health measures directed chiefly to adults, but now they are given with a view to interesting school children. The time of the broadcasts has been advanced to 1 o'clock p. m., and the program continues for thirty minutes. The salute now is "To America's Schools—YOUR HEALTH!" The programs are to be heard over the National network, but all stations connected therewith will not use them, since they are non-commercial. Concerted efforts on the part of medical societies located in communities using the National network would do well to interest themselves in having these programs more generally used. For the remainder of the year, the subjects announced cover a very wide range, and each is especially adapted to school children. We believe that these programs will be of material benefit, and trust that they may be made available to a great per cent of the children of the country.

The attention of JOURNAL readers recently was called to an instrument repairman who recited a glib story concerning his ability to renew all sorts of surgical instruments. Now comes information that in one of our eastern states there is another "gypper" who relates that he is an expert chomium plater and for a modest competence will plate your worn instruments. Of course, the instruments never are returned, but probably are sold in some distant community. Be a bit chary about dealing with alleged repairmen or purchasing instruments from those not connected with legitimate business houses. Anyway, the advertising columns of THE JOURNAL carry full information as to dealers in good surgical instruments, and when you patronize them you are assured of fair dealing and at the same time you are helping your own magazine.

Some time ago the press carried a story about a group medical practice plan introduced at Economy, Indiana. A group of families in that community had entered into a contract with a physician under the terms of which each family was

to pay a stipulated sum per annum, and the physician was to supply medical and obstetrical services to all members of these families. Certain groups of social workers, interested in such chimerical plans, hailed this as a step toward the socialization of medicine in Indiana. Only the other day, headquarters was asked to assist in getting a physician to locate in Economy, and the request carried the information that the contract physician had left the community and that for some reason or another the much heralded "Economy Plan" had not been successful. Thus do we find another dream failing to come to fruition!

The matter of bibliographies in connection with the publication of medical papers is a problem with most editorial officials. Often papers are submitted with long lists of references attached, many of which are not directly referred to in the paper itself. The Board of Trustees of the Medical Society of the State of Pennsylvania seems to have hit upon a very proper solution when they decided that bibliographic references would not be published unless there was a quotation from the reference article. Our own Editorial Board at a meeting in 1934 decided "to use only such references as are definitely referred to in the text." We believe that this is a just ruling and it would be helpful if essayists would conform to it. Those who are interested in a complete bibliography of a subject may be referred to the Index Catalogue of the Surgeon General's Library in Washington or to the Cumulative Index Medicus of the American Medical Association.

The LaPorte *Daily Herald-Argus* for September twenty-fourth presents a most commendable historical article on the first medical school in Indiana, the LaPorte Medical College, founded in 1842; the building was erected two years prior to that date. The article also tells an interesting story about Dr. William Henry Wishard (father of Dr. William N. Wishard, Sr., of Indianapolis), who graduated from the college in 1849. The college diploma of that date bears the signature of the eight members of the faculty, one of whom, Johannes B. Niles, was a local attorney and held the chair of chemistry. The middle name of *our* Dr. Wishard is that of his attorney-teacher, Niles. The story is well written by Edith Backus, secretary of the LaPorte County Historical Society, and carries several excerpts from letters written by the senior Dr. Wishard to his wife who remained in Indianapolis during the time that he attended "courses of lectures" as terms in medical school were called in those days. The whole article is exceptionally interesting and is accompanied by several illustrations.

Among the many signs of the times is the announcement that the United Brewers Industrial Foundation has adopted a "code" after due deliberation and consideration of a widely circulated questionnaire on the subject. Among the matters presented in the "Code of Practice" the one stressed most is that the Foundation proposes of itself, and to see that others fall in line, to conform to the law in all particulars. They declare that they will see to it that the retail sales of beer will be carried on in a most dignified manner and that the retailers must be law-abiding. This is a far cry from the conditions that existed in pre-prohibition days, when the brewers were credited with sales promotion schemes that smacked of practices not to be condoned. An industry of such magnitude as the brewing trade must be reckoned with; the enormous sale of their product is first-rate evidence that they have something the American public wishes to purchase, and it is meet that they should adopt some definite plan of carrying on that business. It remains to be seen how far the Foundation will get with its semi-Utopian ideas.

The directory racket is thriving again in Indiana. Recently an Indiana physician reported that a representative of an automobile accident insurance company had called upon him, asking the physician to serve as company physician and, just incidentally, to have his name included in the company's directory of physicians at a minimum cost, probably twelve dollars! In return, the physician would receive a lot of business from the insurance company and from other companies as well because of his listing. Investigation showed that the insurance company was not licensed to operate in the state in which it was supposed to be established, and the contract offered by the company included several items that were contrary to the law. Requests to the company for financial statements went unanswered. The Indiana physician mentioned above refused the proposal and he is to be commended not only for his wisdom in having nothing to do with the racket but for his courtesy in writing to headquarters office so that other physicians again may be warned that the physician's directory racket is not a dead issue.

The season of Thanksgiving just passed and the nearness of Christmas — the "giving" seasons — prompt the rather personal inquiry as to what *you* have given to your profession? Other than maintaining your county society membership, what have you done to further the interests of the greatest of the professions? What have *you* done to forestall the many attempts to make us wholly subservient? Many hundreds of your fellow physicians of Indiana are giving of their time, even of their money, not only to promote the profession but to save it from those who would bring it under the control of state and federal governments, but

there remain too many who from a lack of knowledge of conditions or from a lack of interest have done and are doing nothing. With the coming of a New Year, let us all resolve to do more for our profession. There is much to do, and a good start will be made if members will see to it that their attendance records at county and district meetings are perked up a bit. Let's cease to be spongelike—absorbing all and giving nothing unless squeezed. All of us see unusual cases once in a while, and the reporting of the unusual symptoms or results provide interesting moments in county medical society meetings, and they add to our store of medical knowledge. Now, while *giving* is uppermost in our minds, let's do a little more of it within our own circles.

The American Social Hygiene Association has selected February 2, 1938, as the date for the second National Social Hygiene Day, and as a theme for the occasion has chosen the slogan, "Stamp Out Syphilis, the Foe of Youth." In a preliminary announcement, several astounding statements are made. For example, " . . . of the half million new cases of syphilis each year, one in five is found in young men and women under twenty years of age." It is further stated that one-half of all syphilitic infections are contracted by the age group of twenty to thirty years, this group comprising but one-fourth of the nation's population. The first Social Hygiene Day, in February of this year, met with a wholesome response in that 500 conference meetings were held and 135 radio addresses were given. The Association confidently expects a greater activity at the time of the second celebration and has invited various civic organizations, Women's Clubs, and P. T. A. groups to arrange special programs for this day. We believe that this is an event of very great importance and commend it to our members in case they are asked to participate in any such local program.

Despite newly enacted laws presumed to assist in solving what has come to be a major problem throught the country, automotive accidents are decidedly on the increase, and particularly so in the crowded centers of population and on the more popular highways. Even our smaller communities are beginning to carry the death totals in their local newspapers. The solution seems still far in the future. The personal element is a great factor in the causation of these indicting figures of accidents, the greater part of which are preventable. After all, the problem seems to be directly lodged in the driver's seat. Some drivers are wantonly careless, some are of the absent-minded type, too intent on mulling over some problem of their own to give consideration to what their car is doing. Others are chance taking, darting in and out of traffic with utter disregard for consequences. And then there is the chap who chooses to mix his gasoline with alcohol to the discomfiture of all with whom he meets upon our streets and highways. Our courts, thanks be, are beginning to crack down on the reckless driver, and to make short shrift of the drunken driver. However, too much lenity is shown drivers of these classes. The reckless driver, at least after one warning, should be deprived of his driver's license. The inebriate should be punished, not alone with a fine but with a jail sentence of no mean proportions. The problem is not lessened by our manufacturers who glowingly advertise their new models that will do ninety or better. It is our opinion that we do not need faster cars; rather do we need cars of safer construction with governors to be set at what may be determined as a speed with a modicum of safety in its determination.

"The warning against sectarianism in upholding the honor of the profession may be reviewed as necessary to the function of professional trusteeship of medical knowledge. There must be complete freedom of research, acceptance, rejection and criticism if that fund is to remain solvent. The injunction to the physician to associate himself with medical societies and contribute his time, energy and means in order that these societies may represent the ideals of the profession has a relation to medical economics. The student entering a medical school at once assumes a debt to the professional association. Without that association there would not be available any such mass of information as is needed for education. When he enters a medical school and begins to use this store of knowledge, he enters into an implicit agreement, which is often made an explicit pledge on graduation and licensure, to pay the debt he owes to the profession by contributing in his turn to the increase of that knowledge and the maintenance of the professional organization and its principles of ethics. The individual physician who refuses to co-operate with his professional association wrongs himself, his profession and his patients by withholding his contribution from the common fund of knowledge while still profiting by the use of that fund. There are at present approximately 300 medical societies in this country exclusive of the units comprised in the American Medical Association. While societies for the study of highly specialized subjects are desirable, even necessary, for the addition of knowledge to the common fund, the utility of many is negligible or questionable. They have the distinct disadvantage of withdrawing from organized medicine the activities and contributions of men of great value to it." This is from the address of Dr. Irvin Abell, president-elect of the American Medical Association, who was guest speaker at the annual banquet of the Indiana State Medical Association at French Lick. This particular paragraph contains much food for thought. It should be read and re-read until the ideas are fully assimilated. It is meant for *you*.

A. M. A. ACTS ON MEDICAL SERVICE PROPOSALS

The most important action taken at Chicago during the annual conference of secretaries and editors of component state medical societies was the statement made by the Board of Trustees of the American Medical Association in regard to numerous so-called "plans and proposals for medical service" about which the profession has been circulated. The conference formally approved the action of the Board of Trustees and urged that the statement be made available to every physician in order that he may know the viewpoint of organized medicine concerning these proposals.

PRINCIPLES AND PROPOSALS OF THE COMMITTEE OF PHYSICIANS

The Board of Trustees has especially authorized the publication of the following statement:

Following the publication of the report of the American Foundation Studies in Government a small group of physicians, assembled in New York, developed certain principles and proposals which have since been circulated by a self-appointed Committee of Physicians among the medical profession of the United States, with a view to obtaining signatures in their support. During a period of aproximately six months, some 430 medical men have apparently permitted the use of their names. Early in November the self-appointed group of physicians released to the press for Sunday, November 7, a statement of principles and proposals to which the names of the 430 signers were affixed. The newspapers generally heralded this action as a revolt against the American Medical Association, in a great majority of the cases indicating that there was a revolt in behalf of "state medicine." The publication of this manifesto and the attached signatures has been heralded with glee by many of those who have been opposing the American Medical Association in behalf of cooperative practice, sickness insurance, and various fundamental changes in the nature of the practice of medicine. Within the last week another series of proposals has come from another self-appointed group requesting signature of physicians. This series of proposals includes the suggestions for enabling legislation for sickness insurance.

The American Medical Association is an organization of physicians along strictly democratic lines. Representatives of county medical societies send delegates to state medical societies and these, in turn, send their delegates to the House of Delegates of the American Medical Association. It is possible for any physician, through his delegate, to obtain consideration of any proposal which he may wish to bring to the attention of the House of Delegates. At the Atlantic City session the delegates from New York State presented these principles and proposals, slightly modified, as an action of the House of Delegates of the New York State Medical Society. They were carried before a reference committee and, in several sessions of that reference committee, considerable numbers of physicians presented arguments for and against their adoption. The House of Delegates, however, after thorough consideration of the report of the reference committee, and with full cognizance of the method of development of these principles and proposals, and of the considerations which were involved in their passage by the House of Delegates of the New York State Medical Society, did not accept them. The House of Delegates did, however, point out the willingness of the medical profession to do its utmost today, as in the past, to provide adequate medical service for all those unable to pay either in whole or in part.

Why, then, any necessity for the circulation of petitions presenting proposals for fundamental changes in the nature of development, distribution and payment for medical service? Is there a well designed plan to impress the executive and legislative branches of our government with the view that the American medical profession is disorganized, distrustful of its leaders, undemocratic in its action and opposed to the best interests of the people? Who may profit from such evidence of disorganization? Is there any evidence that the self-appointed Committee of Physicians and the 430 physicians who have affixed their names to these principles and proposals are any better able to represent the opinion of the American medical profession than the democratically chosen House of Delegates of the American Medical Association —one of the most truly representative bodies existing in any type of organized activity in this country today?

The House of Delegates has given its mandate to the Board of Trustees, to the officers and to the employees of the Association. That mandate opposes the principles and proposal emanating from the Committee of Physicians, and equally the new proposals. If the House of Delegates sees fit to depart from the principles now established, it will be the duty of the Board of Trustees, the officers and the employees of the American Medical Association to promote such new principles as the House of Delegates may establish. Until, however, the regularly chosen representatives of the 106,000 physicians who constitute the membership of the American Medical Association (now the largest membership in its history) determine, after due consideration, that some fundamental change or revolution in the nature of development, distribution and payment for medical service in the United States is necessary, physicians will do well to abide by the principles which the House of Delegates has established. They will at the same time deprecate any attempts inclined to lead the executive

and legislative branches of our government, as well as the people of the United States, into the belief that the American medical profession is disorganized.

Members of the medical profession, locally and in the various states, are ready and willing to consider, with other agencies, ways and means of meeting the problems of providing medical service and diagnostic laboratory facilities for all requiring such services and not able to meet the full cost thereof. The American Medical Association has reaffirmed its willingness on receipt of direct request to cooperate with any governmental or other qualified agency and to make available the information, observations and results of investigation, together with any facilities of the Association. Thus far, no call has come from any governmental or other qualified agency, for the cooperation of the American Medical Association in studying the need of all or of any groups of the people for medical service, to determine to what extent any considerable proportion of our public are actually suffering from lack of medical care. The offer still stands as evidence of the willingness of the American Medical Association to aid in finding a solution to any or all of the problems in the field of medical care that now prevail.

NOTES ON THE SECRETARIES' CONFERENCE

Indiana was well represented at the annual Conference of Secretaries and Editors in Chicago, November 19 and 20. Dr. E. M. Shanklin, editor of The Journal, acted as chairman for the annual dinner meeting of editors on the evening of November 19 at the Palmer House. Other representatives of the Indiana State Medical Association who attended the meeting were Dr. Herman Baker, of Evansville, president-elect of the Indiana State Medical Association; Dr. M. A. Austin, of Anderson, chairman of the Council of the Indiana State Medical Association; Dr. R. L. Sensenich, of South Bend, member of the Board of Trustees of the American Medical Association, and Thomas A. Hendricks, executive secretary of the Indiana State Medical Association.

* * *

Members of the conference were much interested in the analysis prepared by the Executive Committee of the Indiana State Medical Association in regard to the 430 original signers of the principles of the much publicized Committee of Physicians. The summary shows that 218 of the signers hold teaching positions, 18 are full-time health commissioners, and 133 are in private practice. They are located geographically as follows: East, 248; Southeast, 12; West, 55; Northwest, 14; Southwest, 6; South, 17; Middlewest, 68.

Of the 218 having teaching positions, 30 are at Harvard, 21 at Yale, 18 at the University of California, 13 at Washington University, 11 at Columbia, and 10 at Pennsylvania.

It is interesting to note that of the signers, 115 graduated from Harvard and 68 from Johns Hopkins. Of the original 430, none of the signers were Indiana residents and only one had been educated at the Indiana University School of Medicine.

* * *

The original principles and proposals were prepared and distributed by the Committee of Physicians, through the office of Dr. John P. Peters, the secretary, in New Haven, Connecticut. Another set of the principles and proposals is distributed by Dr. E. S. Kilgore, of San Francisco, the second set being distinguished from the original proposals of the committee of 430 in advocating "that government should regard with sympathetic approval and where necessary aid by enabling legislation with programs of insurance for medical care in sickness." One Indiana physician answered the Kilgore communication as follows:

"I am returning, unsigned, your 'To Whom It May Interest.' The vagueness of your second paragraph under (b) '*certain programs of insurance for medical care in sickness now functioning and others contemplated by many units of organized medicine in this country*' is about as near a 'blank check for a pig in a poke' as I have seen requested in a considerable period.

"While I am too far from the scene to discern the selfish purpose to be served in this matter, I want you to know that I suspect such and unless I receive some clarifying statement from you, I shall do what I can to prevent my associates from making a favorable response.

"Organized Medicine has local units capable of caring for problems of local interest. The association of these units with State and National units gives us the best agency for attacking such problems as you presume to be interesting yourself with; and you are quite welcome to the advice implied in that statement."

* * *

The Group Health Association, Incorporated, whereby "unregulated and unlicensed health insurance and corporate practice of medicine in the District of Columbia" has been started, was discussed by Dr. Olin West, secretary of the American Medical Association, and by the representatives from the District of Columbia. The representatives from the District of Columbia made it very clear that the battle they are fighting, in this instance the socialization of medicine, will probably spread to other parts of the country. It is understood that similar plans are being set up by government agencies in Denver and other parts of the country.

"Hold that line" is the suggestion of the Executive Committee of the Indiana State Medical Association in regard to any attempts made to break up the continuity of action by organized medicine in solving these problems of medical service. The Executive Committee has sent the following

(*Continued on Page 672*)

INDIANA MEDICAL HISTORY

FIRST ATTEMPT AT MEDICAL EDUCATION IN INDIANA

JAMES B. MAPLE, M.D.
Sullivan

One hundred years ago, on the first Monday in December, occurred the opening of what is believed to be the first attempt at the establishment of a medical school in Indiana.

In the *Western Sun* of September 23, 1837, printed in Vincennes, appeared the following advertisement:

VINCENNES UNIVERSITY
MEDICAL DEPARTMENT
FIRST COURSE

The lectures in this institution will commence on the first Monday in December, 1837, and end on the first Monday in March, 1838.
Special Anatomy ——— Dr. Offutt
General and Pathological Anatomy— Dr. Maddox
Surgery ——— Dr. Johnson
Obstetrics and Diseases of Women and Children ——— Dr. Hitt
Chemistry and Natural Philosophy, Dr. Troost
Materia Medica and Pharmacy — Dr. Decker
Theory and Practice of Medicine — Dr. Somes
Physiology and Institutes of Medicine— Dr. Stahl

The price of tickets will be $80.00, Matriculation $8.00, Dissecting tickets $5.00, etc.

Degree of L.M.

T. F. Offutt,
Dean of the Faculty.

The *Western Sun* for December 9, 1837, has a note in it which reads, "The lectures in the Medical College of this place commenced Monday last, and I am gratified to state they have been well attended."

A careful check of this newspaper for the next year fails to reveal any bit of evidence of what befell this venture into medical education.

The records of Vincennes University for the year 1837 are missing. However, at the meeting of the Board of Trustees on July 2, 1838, we find that "a communication from the 'Medical Society' was read by the secretary, which was referred to a committee composed of Capt. John B. Martin, John D. Hay and George R. Gibson."

At the next meeting of the Board of Trustees this committee was continued for one more meeting and at this meeting, on September 3, 1838, it reported as follows:

"That should the University claim at this time the right of appointing Professors in the Medical College there is some danger of a conflict with the Trustees of the Seminary and Academy who claim the right of using and occupying the building.

"On the other side, should the Seminary or Academy instead of the University make the appointments then they must do so without authority, and the professors would not be acting under the University Charter, which alone authorises the appointment of such professors. As it is of importance to the Town and Country, that the Professors of Medicine should have ample powers and authority to carry on the same and to confer degrees, if deemed by them necessary, the Committee think it most advisable that the University should make the appointments and confer upon the Professors all the powers necessary to establish a well regulated Medical College.

"The Committee, however, would at the same time recommend that some understanding be had with the Seminary and Academy Trustees upon this subject for which purpose perhaps a Committee had better be appointed to consult with them and effect by agreement that which otherwise might operate to the injury of all the schools.

"The Committee also deem it expedient that the Professors be appointed as soon as some understanding can be had with the Seminary and Academy Trustees as above recommended."

Following the adoption of this committee report, the same committee was appointed to confer with the Trustees of the Vincennes Academy and the Knox County Seminary to ascertain what portion of the University building might be used for a Medical School.

About this time financial difficulties in the way of debts beset the University and the University buildings were leased for a time to others for school purposes, so it is highly probable this attempt at the founding of a Medical College only lasted the one term.

The Medical Society referred to above was the Vincennes Medical Society, which was incorporated under an Act of Legislature approved January 8, 1835. This society followed the Medical Society of the First District of Indiana. Notices of the regular meetings of the First District Society can be found down to 1833. The first notices of the Vincennes Medical Society start in 1835. Its membership embraced men from over the same group of counties that were covered by the First District Society. Men from Sullivan, Davies and Gibson Counties are found upon its membership rolls.

Drs. Joseph Somes and Hiram Decker were

members of the Board of Trustees of Vincennes University at the time of this attempt to start a Medical School. The story of Dr. Decker has been previously related in the JOURNAL. Dr. W. W. Hitt can be found in Kemper's Medical History. Dr. Joseph Somes came to Vincennes about April 1, 1829, from Glasgow, Kentucky, and was a prominent practitioneer until he left in 1872 for Leavenworth, Kansas. Dr. Joseph Maddox came in October, 1831, and bought the drug business of Dr. E. McNamee in 1833. Dr. Daniel Stahl first located at Carlisle, Sullivan County, but moved to Vincennes in September, 1836, where he became a partner of Dr. Somes. He died about 1841. Dr. Troost also practiced at Carlisle, moving there from Vincennes about 1838. Dr. Offutt was also a druggist.

Of these men, Drs. Hitt, Decker and Somes were the most prominent and influential. Dr. Hitt was made a member of the Indiana State Medical Society on the second day of its first annual meeting in 1850, and Dr. Somes became a member later. Dr. Decker was secretary of the First District Medical Society throughout most of its history.

INDIANA STATE BOARD OF HEALTH

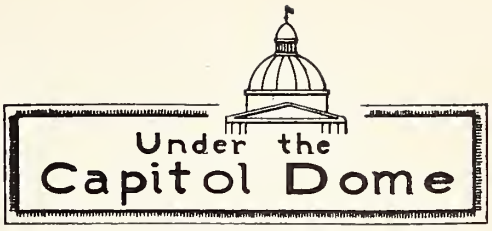
Bureau of Communicable Diseases

Monthly Report, October, 1937

Diseases	*Oct., 1937*	*Sept., 1937*	*Aug., 1937*	*Oct., 1936*	*Oct., 1935*
Tuberculosis	432	187	181	169	171
Chickenpox	93	16	16	110	226
Measles	55	29	72	12	60
Scarlet Fever	576	149	82	354	624
Smallpox	10	8	15	4	6
Typhoid Fever	16	19	26	33	26
Whooping Cough	107	156	131	64	109
Diphtheria	113	42	24	145	470
Influenza	124	45	13	117	103
Pneumonia	63	26	35	53	74
Mumps	19	4	9	24	76
Poliomyelitis	19	49	34	22	13
Meningitis	3	4	5	15	8
Silicosis	1	0	0	0	0
Undulant Fever	5	0	0	1	1
Encephalitis	1	0	0	1	1
Tularemia	1	0	0	0	0

DUES ARE DUE

Your secretary has his receipt books now for 1938 dues. Pay now!



A PARTIAL PROGRAM OF THE INDIANA STATE BOARD OF HEALTH IN THE NATIONAL CAMPAIGN FOR THE PREVENTION AND CONTROL OF VENEREAL DISEASES

A statement on the Indiana State Board of Health's activities program in connection with venereal disease control has been issued by Dr. Verne K. Harvey, board secretary.

The statement said:

The Indiana State Board of Health has coordinated their venereal disease control activities with the medical and allied professions and voluntary organizations. In cooperation with city and county health departments, they are supporting fourteen public health venereal clinics, which are located in the more populous centers of the state. In addition, they receive medical reports each month from five penal and correctional institutions. They also formulated plans for the free distribution of anti-syphilitic drugs for the treatment of indigent patients regardless of the stage of the disease, consisting of twenty doses of the arsenical compound in the form of neo or sulpharsphenamine and twenty injections of heavy metal in the form of bismuth subsalicylate. These anti-syphilitic drugs are also mailed to physicians in communities where public health clinics are located.

The State Board of Health also maintains a laboratory of hygiene in Indianapolis for the use of physicians, venereal clinics and state institutions. Blood specimens and G. C. smears are accepted for examination for indigent venereal patients.

A new and cheaper method of testing blood for syphilis was recently inaugurated by the State Board of Health and Indiana's private pathologists as the first cooperative move in the campaign against the disease. A reduction to $1.00 of private pathological fees is expected to account for several thousand tests in the next year. Because of this program, it is also expected that the Indiana State Board of Health Laboratory of Hygiene will give more than 100,000 free tests during this same period. Recent yearly averages for the state laboratory have been around 50,000 tests, exclusive of this year. The Indiana Association of Pathologists and the Indiana State Board of Health adopted the exclusion test because in the past they used the Wassermann, Kahn and Kline tests, and up to the present time the state and the private pathologists have given all three tests as a matter of routine. Hereafter, only the Kline test will be given in the first instance, and if this test registers negative, no further test will be made. Thus in all cases where the first test is

negative, the expense of two other tests will be saved, allowing more persons the advantage of the blood test for the same charge. In event that the Kline test proves positive in the state laboratory, the Indiana State Board of Health will also run the Wassermann and the Kahn tests. The private pathologists in Indiana have demonstrated beyond all doubt their altruistic attitude and have entered this campaign with the spirit of putting aside private interest.

In their epidemiological field through the Bureau of Venereal Diseases they investigate sources of infection, family contacts, and they cooperate with all city, county and town health officers in this investigational field. They undertake to secure and tabulate other information regarding disposition of cases through the University School of Medicine and Hospitals and other private and public hospitals in the State of Indiana. Ordinary means of educational work, such as news releases for the public press and health journals, exhibiting motion picture films, lantern slides, lectures, and exhibits are used by the department. Meetings are being held with medical societies, nursing associations, social service organizations, P. T. A. associations, lodges, labor unions, Rotary Clubs, Chamber of Commerce organizations, etc. The educational facilities of the State Board of Health have also been used by druggists, dentists, churches, factories, Y. M. C. A. and Y. W. C. A. groups. Simultaneously with this work there have been specially prepared letters and pamphlets mailed to many clubs and organizations. They also have undertaken to correlate and carry on organized measures and activities for the protection of individuals and communities against such practices, amusements and environmental influences favoring the dissemination of syphilis and gonococcal infections.

Dr. Hamilton H. Anderson, of the staff of the American Medical Association, Chicago, was in Indianapolis during the week of November 14 to confer with Dr. Verne K. Harvey, secretary of the Indiana State Board of Health. Dr. Anderson was here in connection with a study of graduate medical education which has been undertaken by the Council on Medical Education and Hospitals of the A. M. A.

Five Illinois medical license holders took a clinical examination for Indiana licenses last month. The examination was conducted by the State Board of Medical Registration and Examination at the Indiana University Medical Center.

The State Board of Medical Registration and Examination revoked the Indiana license of Dr. George H. Espenlaub, of Evansville, at a meeting in the board offices November 16. Dr. Espenlaub is serving a sentence in the Indiana State Prison at Michigan City on a charge of criminal assault. The prison sentence is for one to ten years.

VOICE OF THE DOCTOR

SPEAKING OF OBLIGATIONS

Dear Doctor: Light up the mellow brier, draw that easy chair before the softly glowing open hearth, unfold your toil-weary body into the caressingly cushioned depths, relax your tired legs on the footstool before you, and let's go into executive session—quite frankly.

During the hustle and bustle of today's work, you asked me certain questions to which time and convenience and the nerve-taut tension of the moment did not permit the fullest answers. So I have invited you to sit and commune with me a few moments in order that we may analyze the problem, together, most thoughtfully.

You inquired about Organized Medicine, its whyfore and its wherefore. You said: "What has it done for me? Why should I be interested?"

Let us try to reduce the matter to its most simple principles and then briefly draw a few homely parallels. Doctor, you are fair-minded. By the sheer force of a winsome personality, round by round you have topped the ladder of success, and many enduring friendships are yours. Hence, it is easy to believe that, when any one man courteously and freely does a benefiting service for you, you are only too glad and more than eager to return the favor to him. All real men are. Well, that is just exactly what Organized Medicine has done and is doing for you.

Have you ever paused to ponder over the fact that when you graduated with an M.D. degree and were licensed to practice, bursting with justifiable pride in the hard-sought accomplishment, you stepped at once into a highly organized, efficient, and ready-made profession whose build-up, whose maintenance and continuance, whose improvement and furtherance, was not in one single whit due to even the most minute effort on your part? So far, you had contributed exactly nothing. No! You had been too busy meeting the essential qualifications. You were too young, too inexperienced; you had yet to take your first, faltering footsteps. Nevertheless, here was your field. It was prepared in advance for you. How? Why? Because generation after generation of earnest doctors, long since gone to just rewards, had trod the tortuous and weary pathway beyond merely local and selfish heights; and, through their combined experience, by untold diligence, after many trial balloons of thought and after the discard of many ideas, they had smoothed the roughened trail and marked the dangerous detours and made your entrance into professional life both less arduous and less painful. Through their instruction in medical school, through their numerous texts and periodicals, and through their published researches these many thousands of open-hearted doctors designated you their beneficiary. Seeking naught for themselves, only too

often their contributions entailed many, cruel, personal sacrifices; yet, without cost or price, this bounteous heritage became yours. Professionally, they made you what you are today. And Organized Medicine was their inspiration.

Now, then, what do you suppose should be your obligation? It is this: Make Organized Medicine better tomorrow than yesterday, better ten years from now than today, better a generation hence than then. Thus and thus alone can you ever repay, even in part. It is not asking much.

You say that this is all very altruistic and utopian? Impersonal? It can not affect you? Well, to your own heart answer this: Assuming that, even from the very beginning, medicine never had maintained an organized entity, that doctors never had pulled together in a common cause, would you now be practicing a highly desirable profession or merely plying a common trade? Your answer is correct. It brings the problem right home to you.

Because it trained and educated the leaders, because it sponsored the several and various programs, and because it consolidated the different gains, decade by decade, without Organized Medicine: (a) We would have no medical education as we understand it today, regulated and supervised; most likely, it would be haphazard. (b) Hospital standardization would be unthought of. There would be no clinics, no internships, no residencies, nor any other opportunities for apprenticeship. Without reinvigorating, younger blood, continually depleted and never reinfused, bled white, professional pernicious anemia inevitably would result. (c) There would be no medical licensure, and the citizenry of every state would become the easy and the legitimate prey of the charlatan, the cultist, and the shyster. The public weal would suffer. (d) There would be no authoritative medical texts and but few medical periodicals. The spectral wolves of mental decay and professional disintegration hungrily would stalk your every footstep and would camp snarling and howling before your office door. (e) Scientific medical research would lag or be abandoned. All advancement would be check-mated. (f) Longevity would be foreshortened, life would be cheap, epidemics and disease would run rampant, and the multitude would suffer. (g) Medical practice, instead of drawing to it the most brilliant minds of every generation, would attract instead only the dullard and the sluggard. (h) Medical ethics would lie lifeless in the darkened alley of discord, dead from the stab wounds of supposed friends. (i) Ununited, dispersed, and without authoritative voice, medical practitioners could neither govern nor regulate themselves, and hence they would invite upon the profession both state and federal regimentation, perhaps drastic.

No, that picture is not too gloomy.

But you say that you are only an unpretending practitioner, that you do not live in a large medical center, that you are not connected with a noted university, and that your opportunities for helpful advancement are limited. Think not so. Organized Medicine needs the weight and influence of every ethical doctor, each must do his part, for many if not all of the most profound innovations of medical practice have been made by just such men as you. Their number is legion. Throughout the centuries, their names sparkle with many-faceted brilliance in the firmament of medical progress.

In a little book entitled "Fisherisms," the same being a compilation of lively thrusts made by Dr. Martin H. Fisher, University of Cincinnati, you will find this flash: "The greatest discoveries of surgery are: Anesthesia, Asepsis, and Roentgenology—and none was discovered by a surgeon." It carries the thought that no matter how obscure our stations, however humble our positions, each of us, some time, may do a great service to mankind and to our fellow doctors. Now, whence sprung the driving urge for these pioneers? From Organized Medicine. Who gave widest distribution to these researches? Organized Medicine. What, indeed, doctor, would you be, personally as well as professionally, were you suddenly deprived of all the teachings and all researches of the many smart men even now being inspired by Organized Medicine?

Suppose, for example, that from the very day upon which you stepped out of medical school, as you then felt in your own mind prepared and equipped to practice medicine, let us suppose that from that very day on you had not had access to a single new medical book, to a single medical periodical, to a single medical reprint, and, too, that you had not attended a single County Medical, Hospital Staff, State Society, or National Association meeting, and, even, that you had not heard a single reviewing or advanced thought in medical practice. In other words, erase from your memory with one move all the education which Organized Medicine has brought to you in the succeeding years. In that event, doctor, how do you think you would be practicing medicine now, today? Ten years from now?

Or, suppose that all progressive effort on the part of Organized Medicine suddenly should cease, again now, today? Once again, how do you think that you would be practicing medicine ten years hence? And in your old age? You can mark this down as being as inevitable as the rising sun of morning, as inevitable as the bright sunshine of mid-day, and as inevitable as the enfolding shadows of eventide, the character and calibre of medical practice which you will enjoy in the closing decade of your career depend right now upon what you, personally, are willing to do in support of and in the advancement of Organized Medicine, today, tomorrow, next week, next month, next year. The vicissitudes of life await no one individual. You have but two options. Doom or fortune, you are the master of your own destiny.

Finally, doctor, have you ever given great contemplation to the debt which you owe to your mother? No, probably not; because you have

(*Continued on Page 673*)

MEMBERS OF THE INDIANA STATE MEDICAL ASSOCIATION—1937

Following is a list of members of the Indiana State Medical Association which includes the names of all those who were members on November 20, 1937. Membership established after that date could not be included in this issue of THE JOURNAL.

Members who reside in one county and hold membership elsewhere are listed under the counties in which they reside.

Names of members who have died during the year do not appear on this list.

The letter (H) following a name indicates that the physician is an honorary member of his local society and of the Indiana State Medical Association.

The cooperation of members in reporting any errors found in this list to THE JOURNAL, 1201 Hume Mansur Building, Indianapolis, will be very much appreciated.

ADAMS COUNTY

Berne

Ernest Franz
Myron Habegger
D. D. Jones
H. O. Jones
Amos Reusser

Decatur

S. D. Beavers
R. E. Daniels
Ben Duke
Palmer Eicher
F. L. Grandstaff
G. J. Kohne
J. M. Miller
C. C. Rayl
W. E. Smith
Harold F. Zwick

Geneva

C. P. Hinchman
C. R. Price

Preble

J. C. Grandstaff

ALLEN COUNTY

Fort Wayne

J. R. Adams
Harry Aldrich
Paul P. Bailey
Jos. H. Baltes
A. C. Bartholomew
Karl Beierlein
D. R. Benninghoff
Raymond Berghoff
J. E. Bickel
H. V. Blosser
Theo. R. Borders
C. C. Bosselmann
G. T. Bowers
J. W. Bowers
Robt. H. W. Brosius
H. O. Bruggeman
Doster Buckner
E. L. Bulson
Elizabeth Burns
D. F. Cameron
W. W. Carey
Ernest R. Carlo
E. L. Cartwright
M. B. Catlett
A. R. Chambers
H. R. Chester
W. R. Clark
John E Conley
Charles J. Cooney
Beaumont S. Cornell
C. R. Dancer
I. W. Ditton
M. H. Draper
A. H. Duemling
W. W. Duemling
K. C. Eberly
B. M. Edlavitch
L. W. Elston
Ralph W. Elston
W. F. Engelbert
C. H. English (H)
A. N. Ferguson
A. M. Fichman
M. H. Firestone
H. W. Foy
H. W. Garton
W. F. Gessler
N. H. Gladstone
H. E. Glock
Maurice E. Glock
Wayne R. Glock
L. K. Gould
Allen Hamilton
R. L. Hane
K. C. Hardesty
L. P. Harshman
Harry C. Harvey
Morse Harrod
A. P. Hattendorf
Ruth M. Hoetzer
Jay F. Havice
S. P. Hoffman
Don D. Johnston
J. W. Kannel
O. T. Kidder
E. A. King
E. H. Kruse
W. E. Kruse
J. C. Lill
Maurice Lohman
A. H. Macbeth
Bertha Goba Macbeth
Edward G. McArdle
J. E. McArdle
G. A. McDowell
L. S. McKeeman
D. H. McKeeman
Edgar Mendenhall
Samuel R. Mercer
A. L. Mikesell
Carl G. Miller
O. J. Miller
Richard Miller
C. F. Moats
G. E. Moats
Arthur E. Moravec
H. L. Murdock
Elmer W. Nahrwold
Carroll O'Rourke
C. B. Parker
Kermit Perrin
Milton Popp
M. F. Porter
Nelson H. Prentiss
Henry Ranke
Lyman T. Rawles
H. A. Ray
B. W. Rhamy
W. B. Rice
Walter J. Rissing
Noah Allen Rockey
Juan Rodriguez
D. L. Rossiter
Maurice Rothberg
C. J. Rothschild
Harry W. Salon
N. L. Salon
C. A. Savage
A. R. Savage
D. W. Schafer
E. M. Schellhouse
M. F. Schick
Ed H. Schlegel
H. V. Scott
David I. Schwartz
Herbert Senseny
Lawrence Shinabery
John Short
E. C. Singer
E. D. Smith
Roger C. Sommer
L. E. Somers
A. J. Sparks
Paul L. Stier
A. E. Stoler
John Swanson
Walter Thornton
Phillip S. Titus
E. M. Van Buskirk
Walter H. Vance
Metodi Velkoff
J. C. Wallace
S. G. Welty
Kathryn Whitten
Robt. W. Wilkins
Irving H. Willett
A. H. Williams
A. C. Worley
W. C. Wright
A. R. Wyatt (H)
Jas. L. Wyatt
Noah Zehr

New Haven

J. C. Cowan
C. W. Dahling
G. A. Smith
Berneice M. Williams

Monroeville

S. E. Mentzer
H. E. Steinman

Woodburn

Edward Moser

BARTHOLOMEW COUNTY

Columbus

F. J. Beck
J. W. Benham
Walter S. Fisher
P. C. Graham
Wm. Lennis Green
J. K. Hawes
H. H. Kamman
A. M. Kirkpatrick
Maurice McKain
H. J. Norton
Wm. J. Norton
Lyman Overshiner
Richard K. Schmitt
Wm. B. Sigmund
Lotta A. Suverkrup
Dorothy D. Teal
Everett W. Williams
E. U. Wood
Byron K. Zaring

Hope

J. E. Dudding
Gordon H. Haggard
Robert B. Hart
L. D. Reed

Elizabethtown

O. A. DeLong
C. M. Jackson

Hartsville

Marvin E. Hawes

Jonesville

B. J. Teaford

BENTON COUNTY

Boswell

C. W. Atkinson
O. M. Flack
H. H. Hubbard

Earl Park

Joseph E. Horton

Fowler

W. H. Altier
D. E. Mavity
Verne L. Turley

Oxford

H. G. Bloom
E. E. Parker
Virgil Scheurich

Otterbein

Geo. W. Marsh
J. E. McCabe

Ambia

W. H. Taylor

BOONE COUNTY

Lebanon

H. A. Beck
John D. Coons
O. C. Higgins
C. G. Kern
John R. Porter
E. A. Rainey
Wm. H. Spieth
Chas. O. Weddle
Wm. H. Williams

Zionsville

L. S. Bailey
O. E. Brendel
E. D. Johns

Thorntown

Clancy Bassett

Whitestown

R. J. Harvey

Jamestown

Francis Riley
Alvin Schaaf

Advance

Basil M. Merrell

CARROLL COUNTY

Camden

Chas. Kennedy
Eva Kennedy
Charles Wise

Delphi

George D. Beamer
C. E. Carney
A. C. Clauser
C. C. Crampton
Hubert Gros

Flora

E. H. Brubaker
Andrew J. Cook
A. G. Moore
Arthur Richter

Burlington

J. R. McLaughlin

Burrows

Geo. W. Wagoner

Rockfield

H. Y. Mullin

CASS COUNTY

Logansport

C. A. Ballard
W. E. Barnett
J. H. Barnfield
J. C. Bradfield
Thomas L. Cooper
J. C. Davis
B. W. Egan
E. L. Hedde
W. R. Hickman
Marian Hochhalter
W. A. Holloway
W. W. Holmes
Thomas L. Keefe
J. B. Maxwell
C. H. McCully
M. A. McDowell
Earl Palmer
J. H. Reed
Joseph Rubsam
Foss Schenck
Harry Schultz
Milton B. Stewart
F. W. Terflinger
H. D. Tripp
Charles L. Viney
C. L. Williams
Paul D. Williams
P. H. Wilson

Galveston

C. T. Dutchess

Royal Center

D. R. Ivey
W. K. Newcomb

Twelve Mile

Donald L. Miller

Walton

E. P. Flanagan
E. A. Spohn

CLARK COUNTY

Jeffersonville

Samuel L. Adair
J. H. Baldwin
Ralph Bruner
E. P. Buckley
Austin Funk
C. F. C. Hancock
Nathaniel C. Isler
H. H. Reeder
William M. Varble
H. R. Wilber

Sellersburg

Samuel S. Foss
A. C. Vandevert

Charlestown
T. J. Marshall
New Washington
R. S. Taggart
Henryville
Houston W. Shaw

CLAY COUNTY

Brazil
Fred C. Dilley
J. L. Lambert
J .F. Maurer
Frederick Nussel (H)
John M. Palm
H. M. Pell
John C. Shattuck
C. C. Sourwine
T. M. Weaver
R. K. Webster
Clay City
Walter Bond
L. C. Rentschler
Staunton
P. H. Veach
Coalmont
H. H. Ward
Carbon
J. W. VanSandt

CLINTON COUNTY

Frankfort
F. A. Beardsley
M. F. Boulden
C. A. Burroughs
A. C. Chittick
C. B. Compton
T. A. Dykhuizen
Alexander Hamilton
R. A. Hedgecock
J. M. Johnson
W. W. Jones
C. A. Robison
Hollace R. Royster
Benson Ruddell
S. B. Sims
J. A. Van Kirk
B. A. Work
Mulberry
Nelson B. Combs
J. A. Kent
Sedalia
Ivan E. Carlyle
Rossville
John S. Ketcham
Kirklin
Wm. C. Mount
Michigantown
A. A. Williamson
Colfax
W. H. Wisehart

CRAWFORD COUNTY

English
N. E. Cobbel
C. B. Hammond
Milltown
Jess J. Johnson

DAVIESS-MARTIN COUNTIES

Loogootee
Wm. Gilkison
Emory B. Lett
J. F. Michaels
J. W. Strange
Odon
I. E. Bowman
Henry C. Coleman
Jerome DeMotte
Shoals
J. S. Cilkison
E. E. Long
Washington
N. Maude Arthur
Arthur C. Blazey
B. O. Burress
C. P. Fox
H. B. Lindsay
Wm. O. McKittrick
S. L. McPherson
A. A. Rang
E. Brayton Smoot
H. C. Wadsworth
Burns City
T. A. Hays
Elnora
Mac Cuyer Porter
J. R. Rohrer
Plainville
D. H. Swan

DEARBORN-OHIO COUNTIES

Aurora
Wm. F. Duncan
J. K. Jackson
J. M. Jackson
C. W. Olcott
O. H. Stewart
James F. Treon
E. R. Wallace
Lawrenceburg
A. T. Fagaly
Wm. J. Fagaly
E. M. Gherman
Edwin L. Libbert
J. M. Pfeifer
C. F. Smith
Rising Sun
Geo. H. Hansell
C. N. Manley
Dillsboro
Frank Downey
Guilford
John E. Elliott

DECATUR COUNTY

Greensburg
P. C. Bentle
W. C. Callaghan
F. C. Denny
H. S. McKee
C. C. Morrison
J. T. Morrison
Charles Overpeck
E. T. Riley
I. M. Sanders
W. E. Thomas
B. S. White (H)
Letts
D. D. Dickson
Milhousen
J. W. Herr
Westport
E. A. Porter
Chas. Wood
Adams
M. A. Tremain
Clarksburg
John E. Fisher
St. Paul
W. R. Turner

DEKALB COUNTY

Auburn
H. M. Covell
L. N. Ceisinger
A. V. Hines
D. M. Hines
Harold Nugen
J. A. Sanders
Bonnell M. Souder
C. S. Stewart
Willard W. Swarts
Butler
Clayton B. Hathaway
W. F. Shumaker
Chas. Weirich
Garrett
J. E. Douglas
M. E. Klingler
M. O. Klingler
R. A. Nason
D. M. Reynolds
W. C. Symon
J. W. Thomson
Waterloo
E. A. Ish
J. P. Showalter

DELAWARE-BLACKFORD COUNTIES

Eaton
G. F. Ames (H)
J. M. Atkinson
O. A. Hall
T. J. Mansfield (H)
Hartford City
Wendell W. Ayres
H. L. Buckles
Geo. H. Dando
J. W. Morris
Guy. A. Owsley
Bryce P. Weldy
L. E. Werry
Montpelier
T. J. McKean
F. M. Reynolds
Muncie
Clay A. Ball
Roscoe H. Beeson
Margaret F. Benjamin
Henry E. Bibler
E. V. Boram
Chas. L. Botkin
John H. Bowles
Karl T. Brown
Rollin H. Bunch
E. H. Clauser
J. H. Clevenger
R. E. Cole
Nila Covalt
Donald A. Covalt
H. A. Cowing (H)
Elmer T. Cure
E. C. Davis
O. M. Deardorff
J. Frank Downing
F. W. Dunn
T. R. Hayes
F. E. Hill
Howard E. Hill
Robert Hill
Anson C. Hurley
A. T. Kemper
F. E. Kirshman
Jules La Duron
C. A. Leatherman
R. M. McMichael
T. J. Mansfield
L. R. Mason
C. E. Miller
W. J. Molloy
L. C. Montgomery
Paul D. Moore
W. C. Moore
Josephine Murphy
Thos. R. Owens
Wm. J. Quick
A. C. Rettig
J. C. Silvers
J. M. Silvers
O. E. Spurgeon
W. A. Spurgeon (H)
C. J. Stover
E. F. Tindal
Elaine Vlaskamp
L. O. Walters
John H. Williams
Amelia T. Wood
Cerald S. Young
Daleville
J. R. Hurley
O. Arnold Tucker
Gaston
Fred Langsdon
Albany
K. E. Puterbaugh
Yorktown
C. H. Wright

DUBOIS COUNTY

Huntingburg
W. D. Bretz
Chester A. Hicks
A. H. Held
H. C. Knapp
E. G. Lukemeyer (H)
L. C. Lukemeyer
S. L. McKinney
C. W. Schwartz (H)
E. F. Steinkamp
Harvey Stork
Jasper
Paul J. Blessinger
J. F. Casper
M. C. Heck
St. John Lukemeyer
Leo A. Salb
C. O. Schoier
Ferdinand
H. G. Backer
A. F. Cugsell
Holland
Geo. A. Held
Ireland
L. B. Johnson (H)

ELKHART COUNTY

Elkhart
T. D. Arlook
C. E. Bowdoin
R. A. Bowman
Fred N. Dewey
L. A. Elliott
C. F. Fleming
J. C. Fleming
Justus M. Fleming
Geo. W. Grossnickle
A. W. Hull
M. F. Hunn
Arthur W. Kistner
John W. Kistner
Elmer G. Koehler
Benj. F. Kuhn
W. C. Landis
Milo O. Lundt
I. J. Markel
H. N. McKee
S. T. Miller
Irving Mishkin
Allen A. Norris
G. B. Patrick
H. C. Schlosser
M. Maywood Sears
Walter Allen Stauffer
R. B. Stout
L. Forest Swank
L. F. Swihart
D. D. Todd
K. W. Vetter
S. C. Wagner
O. E. Wilson
James A. Work
Goshen
Cecil K. Bender
H. P. Bowser
Henry W. Eby
F. M. Freeman
W. R. Kelly
M. K. Kreider (H)
Herbert K. Lemon
Floyd S. Martin
Malcolm E. Miller
W. B. Page
Vernon W. Pancost
L. H. Simmons
H. E. Vanderbogart
Albert C. Yoder
Ralph H. Young
Middlebury
M. A. Farver
Melvin Teters
Nappanee
Henry Defrees
R. A. Fleetwood
Melvin Delbert Price
W. A. Price
J. S. Slabaugh
Lotus M. Slabaugh
Wakarusa
Chas. L. Amick
F. I. Eicher
Millersburg
R. E. Estlick
New Paris
E. D. Stuckman
Charles Eisenbeiss

FAYETTE-FRANKLIN COUNTIES

Brookville
E. M. Claser
Ralph Sappenfield
H. N. Smith
Connersville
L. N. Ashworth
Irvin E. Booher
Jediah H. Clark
R. H. Elliott
Stanley Cordin
Stanton E. Cordin
Albert F. Cregg
W. A. Kemp
J. S. Leffel
H. C. Metcalf
R. D. Morrow
Francis Mountain
David C. Pugh
H. W. Smelser
F. J. Spilman
Everton
O. E. Dale
Laurel
S. A. Gifford

FLOYD COUNTY

New Albany
A. M. Baker
James W. Baxter
J. W. Baxter, Jr.
S. M. Baxter
J. E. Bird
C. E. Briscoe
D. F. Davis
Parvin Davis
Geo. H. Day
W. F. Edwards
W. H. Garner
John P. Centile
John F. Habermel
W. A. Hall
R. W. Harris (H)
A. P. Hauss
Chas. P. Leuthart
Wm. Moore (H)
P. R. Pierson
Cretchen I. Polhemus
A. N. Robertson
S. T. Rogers
Carl P. Schoen
P. H. Schoen
H. B. Shacklett
W. L. Starr (H)
F. T. Tyler
Harry Voyles
Amzi Weaver
Wm. W. Weaver
W. C. Winstandley
M. F. Wolfe
Georgetown
H. K. Engleman
Galena
E. L. Sigmon

FOUNTAIN-WARREN COUNTIES

Attica
J. Roy Burlington
James C. Freed
Albert C. Holley
A. R. Kerr
Covington
J. W. Aldridge
Earl E. Johnson
Simeon Lambright
Alva Spinning
Kingman
A. L. Ratcliff
B. J. Smith
Williamsport
S. S. DeLancey
C. S. Porter
T. E. Ward
Hillsboro
E. C. Bounell
Pine Village
Ceo. W. Dewey
Veedersburg
C. B. McCord
Jno. B. Owens
Wallace
Hubert M. Rusk
West Lebanon
Richard Stephenson
Kramer
Clara S. Eirley

FULTON COUNTY

Rochester
G. E. Hoffman
M. O. King
M. E. Leckrone
H. W. Markley
Mark M. Piper
C. L. Richardson
Dean K. Stinson
Fulton
F. C. Dielman
Akron
C. L. Herrick
Virgil Miller
Kewanna
L. E. Kelsey
Kenneth Kraning
Athens
A. E. Stinson

GIBSON COUNTY

Haubstadt
Austin F. Marchand
Edwin V. Marchand
V. H. Marchand
Harold G. Petitjean
Oakland City
C. M. Clark
J. W. McCowan
E. R. Ropp
R. W. Wood
Owensville
C. B. Beresford
J. W. McGowan
J. R. Montgomery
Karl S. Strickland

Princeton
H. H. Alexander
O. T. Brazelton
Orville M. Graves
M. P. Hollingsworth (H)
Virgil McCarty
R. S. McElroy
Chas. A. Miller
J. L. Morris
A. H. Rhodes
W. B. Wood
A. L. Ziliak

Hazelton
H. M. Arthur

Patoka
M. L. Arthur

Fort Branch
B. C. Gwaltney
Wm. F. Morris

GRANT COUNTY

Fairmount
Z. T. Hawkins
Glenn Henley
L. D. Holliday

Marion
Charles F. Abell
W. T. Bailey
Grace B. Boyer
W. W. Bourke
Robert F. Braunlin
W. H. Braunlin
Robert McD. Brown
A. D. Burge
V. V. Cameron
B. C. Dale
E. O. Daniels
G. R. Daniels
A. T. Davis
M. S. Davis
Robert H. Dunn
G. G. Eckhart
L. H. Eshleman
W. A. Fankboner
Pierre J. Fisher
H. R. Goldthwaite
A. D. Huff
R. W. Lavengood
Ralph E. LeMaster
M. J. Lewis
Harold E. List
J. F. Loomis
Eleanor McIlwain
Robert McIlwain
J. D. McKay
H. A. Miller
C. J. Overman
Nettie B. Powell
Mowey Presberg
Sidney Price
G. G. Richardson
J. A. Ritchey
S. G. Silverburg
E. M. Trook
J. C. Vaughan
Samuel Weinberg

Jonesboro
Russell Baskett

Van Buren
M. L. Bridge
John E. Derbyshire
H. W. Nyce

Gas City
L. H. Conley (H)
Leon J. Garrison
Fred Tavenner

Swayzee
P. C. King
Wm. S. Resoner

Upland
E. C. Taylor

GREENE COUNTY

Bloomfield
King L. Hull
Mathias S. Mount
H. B. Turner
F. A. VanSandt

Linton
Frank A. Bailey
P. C. Berns
W. F. Craft
C. C. Hamilton
Geo. C. Porter
B. B. Raney

Worthington
J. W. Clifford
George E. Moses

Newberry
Luther Hamilton

Jasonville
Carl M. Porter
Sam Rotman

Lyons
J. S. Simons

HAMILTON COUNTY

Carmel
Ross A. Cooper
C. M. Donahue

Cicero
E. D. Havens
Russell E. Havens
C. H. Tomlinson

Noblesville
W. E. Catterson
J. E. Hanna
R. F. Harris
Sam W. Hooke
Ray W. Shanks
J. D. Sturdevant

Sheridan
I. W. Davenport
J. W. Griffith
A. C. Newby
J. L. Reck
E. M. Young

Westfield
Andrew F. Connoy

Arcadia
Frank Rodenbeck
J. C. Ambrose

HANCOCK COUNTY

Fortville
Jas. B. Ellingwood
Jesse E. Ferrell
Samuel W. Hervey
Stewart Slocum
Hugh K. Navin

Greenfield
J. L. Allen
Ralph N. Arnold
C. H. Bruner
Chas. Milo Gibbs
Oscar Heller
R. E. Kinneman
L. B. Rariden
James R. Woods

New Palestine
W. H. Larrabee
E. E. Mace
Thomas A. Pierson

Wilkinson
E. R. Gibbs
Charles Titus

Charlottesville
W. R. Johnston

HARRISON COUNTY

Corydon
W. E. Amy
F. M. Applegate
Carl E. Dillman

Crandell
G. D. Baker

Elizabeth
Fred Bierly

Ramsey
L. F. Glenn

Mauckport
Alfred Mathys

Lanesville
E. W. Murphy

Palmyra
F. A. May

HENDRICKS COUNTY

Brownsburg
Lloyd E. Foltz
A. N. Scudder

Danville
L. W. Armstrong
Mount E. Frantz
Joseph W. Gibbs
J. H. Grimes
W. T. Lawson

Plainfield
Milo M. Aiken
E. H. Blackledge
J. C. Stafford
C. B. Thomas

Coatesville
W. J. Fuson

Clayton
Rilus E. Jones

North Salem
E. Ray Royer
Robert Wisehart

Pittsboro
O. T. Scamahorn

HENRY COUNTY

Knightstown
E. B. Call
O. H. Rees
John Ivan Waller

Middletown
R. D. Arford
Farrol Dragoo
Joseph H. Stamper

Newcastle
R. L. Amos
C. C. Bitler
JamesG. Bledsoe
C. E. Canaday
E. S. Ferris
B. L. Harrison
W. C. Heilman
G. E. Iterman
W. U. Kennery
H. H. Koons
H. W. MacDonald
J. H. McNeill
Robert A. Smith
Walter M. Stout
C. E. Thorne
J. A. Tully
W. C. Van Nuys
E. K. Westhafer
D. S. Wiggins
George Wiggins
W. W. Wright

Mt. Summit
L. C. Marshall

Blountsville
Paul Marsh

Lewisville
Marion R. Scheetz

Spiceland
W. S. Robertson

Shirley
Ralph Wilson

HOWARD COUNTY

Kokomo
C. J. Adams
E. N. Bennett
Elton R. Clarke
R. A. Craig
F. S. Cuthbert
G. N. Druley
P. W. Ferry
W. W. Gipe
W. H. Harrison
L. R. Knepple
E. F. Kratzer
A. G. Long
B. D. Lung
R. E. McIndoo
Wilbur J. Marshall
Will J. Martin
J. A. Meiner
D. A. Morrison
W. R. Morrison
F. N. Murray
F. M. Olmstead
Durwood W. Paris
John P. Pennell
L. M. Reagan
H. M. Rhorer
R. P. Schuler
R. F. Scott
W. I. Scott
E. M. Shenk
Jesse S. Spangler

Greentown
C. F. Kercheval
Homer B. Shoup, Jr.

Russiaville
R. M. Evans

HUNTINGTON COUNTY

Huntington
Harold S. Brubaker
Stanley M. Casey
A. C. Chenoweth
Myers B. Deems
M. G. Erehart
J. B. Eviston
Ruben F. Frost (H)
B. H. B. Grayston (H)
F. W. Grayston
Wallace S. Grayston
R. G. Johnston
Robert Meiser
F. B. Mitman
Grover Nie
G. G. Wimmer

Markle
A. M. Hasewinkle
A. H. Northrup

Roanoke
O. P. Bigelow

Warren
Claude S. Black
L. W. Smith

Andrews
S. S. Frybarger

JACKSON COUNTY

Crothersville
Wm. K. Adair
P. A. Kendall

Seymour
W. Durbin Day
C. E. Gillespie
Harold P. Graessle
G. H. Kamman
Guy Martin
Louis Osterman
D. L. Perrin
E. D. Wright

Brownstown
Chas. L. Ackerman
G. R. Gillespie

Freetown
T. E. Conner

Ewing
D. J. Cummings

Cortland
J. M. Jenkins

Medora
Neal Matlock
M. O. Robertson

JASPER-NEWTON COUNTIES

Brook
W. G. Pippenger

Goodland
C. C. Bassett
Arthur L. Cramp
Ralph H. Ruhmkorff

Kentland
O. E. Glick
W. C. Mathews
G. H. VanKirk

Morocco
G. D. Larrison
L. H. Recher

Rensselaer
H. E. English
M. D. Gwin
C. E. Johnson
Chas. Keith Hepburn
A. R. Kresler

Wheatfield
J. C. Bucher

Remington
Frank G. Sink

Lake Village
Raymond Merchant

JAY COUNTY

Dunkirk
E. C. Garber
E. H. Hall
Don P. Murray

Portland
A. C. Badders
George Cring
Forrest Keeling
Mark M. Moran
J. E. Nixon
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Wanatah

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Wallace Buchanan
E. Lee Burrous
R. H. Draper

Bourbon
Cova R. Graham
F. E. Radcliffe

Tyner
A. A. Thompson

MIAMI COUNTY

Peru
E. H. Andrews
J. B. Berkebile
O. U. Carl
B. F. Eikenberry
Donald W. Ferrara
S. J. Ferrara
Cloyn R. Herd
Cecil F. Jordan
O. R. Lynch
F. M. Lynn
S. D. Malouf
O. C. Wainscott
J. E. Yarling

Amboy
E. E. Shrock

Bunker Hill
R. E. Barnett

Chili
H. E. Line

Converse
Fred Malott
A. S. Newell

Mexico
C. F. Rendel

Macy
W. K. Sennett

Miami
James B. Shoemaker

MONROE COUNTY

Bloomington
F. H. Austin
R. C. Austin
F. H. Batman
Neal Baxter
R. M. Borland
W. N. Culmer
R. A. Demotte
Dillon Geiger
Chas. Holland
J. E. P. Holland
D. J. Holland
Phillip Holland
D. L. Lutes
J. E. Luzadder
Robt. Lyons
C. H. Marchant
J. E. Moser
B. D. Myers
Margaret T. Owen
M. F. Poland
Hugh Ramsey
Wm. C. Reed
Floyd Rogers
R. C. Rogers
Ben. R. Ross
Melville Ross
R. D. Smith
H. G. Steinmetz
C. C. Stroup
Harry B. Thomas
Frank F. Tourner
W. T. Van Dament
T. L. Wilson
James W. Wiltshire
Homer Woolery

Smithville
G. L. Mitchell

MONTGOMERY COUNTY

Crawfordsville
T. Z. Ball
G. A. Collett
Thomas L. Cooksey
Fred N. Daugherty
L. H. Davis
Fred.A. Dennis
Wemple Dodds
J. B. Griffith
H. A. Kinnaman
Byron N. Lingeman
A. L. Loop
Robt. Millis
Wm. M. Mount
John L. Sharp
W. L. Straughn
Hawthorne C. Wallace
G. T. Williams

Darlington
J. B. Cushman
Ralph E. Otten
Robert R. Pollom

Ladoga
Frank T. Denny
Maurice E. Gross

Wingate
F. D. Allhands
C. B. Parker

Waynetown
H. M. Bounnell
A. S. Faulkner

New Richmond
H. D. Kindell

Waveland
Jas. Noblitt

Russellville
E. E. Richards

MORGAN COUNTY

Martinsville
P. M. Alexander
C. G. Bothwell
H. H. Dutton
Robert Egbert
Leon Gray
B. E. Lemmon
Edw. M. Pitkin
M. C. Pitkin
Geo. L. Sandy
S. P. Scherer
Austin D. Sweet
E. M. Sweet
H. R. Willan

Mooresville
Charles Aker
Kenneth Comer
J. E. Comer
W. J. Stangle

Brooklyn
L. M. Hughes

Paragon
G. S. Silliman

Morgantown
M. G. Murphy

NOBLE COUNTY

Albion
W. F. Carver
J. W. Morr
J. R. Nash

Kendallville
C. B. Goodwin
Richard R. Gutstein
C. F. Hardy
I. H. Lawson
F. W. Messer
C. E. Munk
J. D. Seybert
H. O. Williams
S. J. Young

Ligonier
J. B. Schutt
W. A. Shobe (H)
T. N. Siersdorfer
Q. F. Stultz

Wolflake
H. A. Luckey
J. E. Luckey
R. C. Luckey

Cromwell
J. H. Nye
A. J. Rarick

Avilla
Wm. Veazey
K. D. Sneary

Rome City
August L. Fipp

ORANGE COUNTY

French Lick
George R. Dillinger
J. R. Dillinger
C. D. Fulkerson

Orleans
Robert E. Baker
Wm. E. Schoolfield
Oscar H. Stewart
W. S. Workman

Paoli
Ivan A. Clark
R. L. Holaday
John I. Maris
S. F. Teaford

West Baden
Clarence E. Boyd
Mart Hassenmiller
H. L. Miller

Leipsic
G. G. Colglazier

OWEN COUNTY

Spencer
M. S. Brown
Oran Kay
Robert H. Pierson

Coal City
Boaz Yocum

Patricksburg
R. H. Richards

Gosport
Julia S. Thom
J. W. Thom

PARKE COUNTY
VERMILLION COUNTY

Clinton
I. M. Casebeer
Paul B. Casebeer
Ott Casey
W. D. Gerrish
D. C. Shaff
J. F. Swayne
C. M. White
I. D. White
C. M. Zink

Dana
Wm. C. Myers
A. E. Sabin

Rockville
J. R. Bloomer
T. J. Collings
E. H. Dowell
Walter A. Foreman
Casper Harstad
J. V. Pace
H. B. Pirkle

Blanford
John W. Clubb

Cayuga
R. E. Brown
S. C. Darroch

Montezuma
R. L. Dooley

Bloomingdale
F. G. Green

St. Bernice
S. I. Green

Perrysville
W. A. Johnson

Newport
J. L. Saunders

Rosedale
I. G. Gill
C. S. White

PERRY COUNTY

Cannelton
H. R. Bush
E. E. Schriefer

Tell City
Porter J. Coultas
David Dukes
Fred C. Glenn
W. T. Hargis
N. A. James
George Petro

Bristow
S. L. Epple

Troy
E. R. Snyder

Leopold
J. E. Taylor

PIKE COUNTY

Petersburg
G. A. Dickinson
J. T. Kime
A. R. Logan
L. M. McNaughton
T. R. Rice

Winslow
Loranza D. Goodwin
G. B. DeTar

Velpen
D. E. Taylor

PORTER COUNTY

Hebron
W. C. Butman
F. J. Kleinman

Valparaiso
J. C. Brown
P. M. Corboy
Carl M. Davis
C. H. Dewitt
A. O. Dobbins
G. R. Douglas
Ralph C. Eades
J. R. Frank
M. B. Fyfe
E. H. Miller
E. H. Powell
H. O. Seipel
G. H. Stoner
Arthur J. Van Winkle

Chesterton
R. H. Axe
J. W. Dale
W. M. Parkison

Kouts
S. E. Dittmer

Porter
G. C. Kasdorf

POSEY COUNTY

Cynthiana
S. B. Montgomery

Mt. Vernon
W. B. Challman
C. H. Fullinwider
W. E. Jenkinson
F. W. Oliphant
J. R. Ranes

New Harmony
H. E. Ropp
H. C. Rininger

Poseyville
Paul Boren
S. W. Boren
A. L. Woods

Wadesville
Chas. Arburn

PULASKI COUNTY

Winamac
Thos. E. Carneal
H. J. Halleck

Monterey
A. J. Kelsey

Medaryville
C, E. Linton

PUTNAM COUNTY

Cloverdale
Clyde Gray
E. M. Hurst
C. B. Southard

Greencastle
J. F. Gillespie
W. R. Hutcheson
C. B. O'Brien
W. M. O'Brien
W. M. McGaughey
Gilbert D. Rhea
C. C. Tucker
E. V. Wiseman

Roachdale
Dick J. Steele
C. N. Stroube

Bainbridge
Lester W. Veach

Putnamville
George Tennis

RANDOLPH COUNTY

Farmland
O. E. Current
Russell B. Engle
Byron Nixon

Union City
Leroy B. Chambers
George H. Davis
L. K. Phipps
Robert W. Reid
Fred Ruby
R. A. Voisinet

Winchester
I. E. Brenner
W. S. Dininger
L. W. Painter
J. S. Robison

Parker
P. C. Barnard
William Deutsch

Modoc
Wayne Harmon

Ridgeville
Arvin Henderson
C. W. Mullikin

Lynn
L. E. Jordan
C. E. Martin
J. M. Wallace

Saratoga
C. E. Spliter

RIPLEY COUNTY

Batesville
J. C. Bigham
J. T. Carney
L. W. Hisrich

Milan
Bine Whitlatch
I. A. Whitlatch

Osgood
George S. Row
R. Lee Smith

Sunman
Chas. F. Fletcher

Holton
M. F. Daubenheyer

Versailles
Wm. M. Loehr

RUSH COUNTY

Rushville
C. C. Atkins
J. F. Bowen
Donald I. Dean
F. H. Green, Sr.
F. H. Green, Jr.
Lowell.M. Green
R. O. Kennedy
John M. Lee
H. V. Logan
H. P. Metcalf
Roy.E. Shanks
C. L. Smullen
J. E. Walther
E. I. Wooden

Arlington
C. C. McFarlin

Carthage
William S. Coleman
G. B. McNabb

Glenwood
W. R. Phillips

Homer
D. E. Barnett

Milroy
Robert Spindler

ST. JOSEPH COUNTY

Mishawaka
James G. Bostwick
Verna Christophel
W. B. Cristophel
W. N. DuVall
Chas. J. Goethals
B. M. Hutchinson
F. W. Logan
R. M. McDonald
C. H. Proudfit
Jacob Rosenwasser
J. B. Seaman
E. M. Sirlin
Wendell L. Spalding
L. P. VanRie
Merle E. Whitlock
H. C. Wurster
M. D. Wygant
B. J. Wyland
Henry J. Zimmer

South Bend
J. A. Abel
Robt. B. Acker
G. B. Allen
E. K. Ayling
W. H. Baker
Morris Balla
J. B. Berteling
S. E. Bechtold
David A. Bickel
P. J. Birmingham
Chas. A. Bishop
Erwin Blackburn
B. J. Bolka
L. A. Bolling
John C. Boone
C. S. Bosenbury
Harry Boyd-Snee
Fred W. Buechner
C. F. Bussard
C. S. Campbell
F. R. Nicholas Carter
J. V. Cassady
F. R. Clapp
Stanley.A. Clark
Wm. H. Clark
David H. Condit
H. L. Cooper
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R. B. Dugdale
J. A. Duggan
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Alfred Ellison
Lester.G. Ericksen
Ladislaus Faltin
Waldo C. Farnham
J. H. Fears
C. M. Fish
Lawrence F. Fisher
L. L. Frank
DeVon W. Frash
Gladys D. Frith
Louis G. Frith
Geo. J. Geisler
M. M. Gilman
A. S. Giordano

J. M. Gordon
George F. Green
Donald Grillo
Paul E. Haley
Vachelle E. Harmon
H. W. Helmen
John W. Hilbert
Marion W. Hillman
W. H. Hillman
R. V. Hoffman
Lillian S. Holdeman
R. W. Holdeman
A. D. Huffman
Carroll Hyde
Bernard A. Kamm
Arthur L. Knapp
Kenneth T. Knode
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Joseph E. Lang
E. J. Lent
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N. S. Lindquist
Martha B. Lyon
M. W. Lyon
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J. E. McMeel
W. H. Mikesch
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William E. Miller
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E. P. Moore
C. A. Mott
Thomas B. Pauszek
Andrew Petrass
Harold D. Pyle
Herman H. Rodin
George M. Rosenheimer
Ruth F. Rasmussen
E. L. Rigley
Carl J. Rudolph
Robert B. Sanderson
Isadore Sandock
Harry H. Sandoz
Louis A. Sandoz
C. E. Savery
Keith E. Selby
C. M. Sennett
R. L. Sensenich
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H. H. Slominski
R. W. Spenner
A. M. Sullivan
C. C. Terry
Ray H. Thomas
Maurice J. Thornton
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Henry E. Vitou
W. G. Wegner
J. L. Wilson

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John J. Hardy

Lakeville
John T. How
Louis E. How

Osceola
H. L. Warrick

Walkerton
C. D. Linton

New Carlisle
R. K. Arisman
J. E. Luzadder, Jr.

SCOTT COUNTY

Scottsburg
Marvin McClain
Floyd Napper
J. P. Wilson

SHELBY COUNTY

Shelbyville
R. W. Gehres
Jewett Hord
Herbert Inlow
C. Fred Inlow
W. D. Inlow
B. G. Kecney
Samuel Kennedy
Walter Mc Fadden
R. M. Nigh
L. C. Sammons
P. R. Tindall
W. R. Tindall
W. W. Tindall

Waldron
S. B. Coulson
J. E. Keeling

Flat Rock
J. A. Davis

Morristown
Margaret L. Maisoll
V. C. Patten

Fairland
M. M. Wells

SPENCER COUNTY

Rockport
K. C. Achison
Eva J. Buxton
C. D. Ehrman
J. C. Glackman

Newtonville
H. T. Harter

Dale
Claude Lomax
John H. Barrow

Lamar
N. L. Medcalf

Chrisney
C. L. Springstun

Richland
W. P. Jolly

St. Meinrad
V. V. Schriefer

STARKE COUNTY

North Judson
P. O. Englerth
Albert Fisher

Knox
J. F. DeNaut
J. R. Matthew

Hamlet
J. L. DeNaut

STEUBEN COUNTY

Angola
L. L. Eberhart
S. S. Frazier
Katherine Jackson
W. H. Lane
O. H. Swantusch
W. F. Waller

Fremont
B. A. Blosser

Pleasant Lake
G. N. Lake

Helmer
R. D. Denman

SULLIVAN COUNTY

Carlisle
J. S. Brown
Charles E. Whipps

Dugger
E. M. Deputy
F. M. Dukes

Farmersburg
Harry O'Dell
J. T. Oliphant

Shelburn
Vincent R. Lazo
J. H. Wrork

Sullivan
Marion H. Bedwell
J. M. Billman
C. F. Briggs
E. M. Corbin
James H. Crowder
J. R. Crowder
Paul Higbee
J. B. Maple
G. D. Scott
W. N. Thompson

Fairbanks
H. E. Bland

Hymera
C. U. Thralls

Merom
John W. Woner

SWITZERLAND COUNTY

Vevay
Fred C. Bakes
L. H. Bear
G. W. Copeland
R. M. Copeland
Geo. E. Ellerbrook

TIPPECANOE COUNTY

Lafayette
A. C. Arnett
A. J. Bauer
R. H. Bayley
Harry Buhrmester
R. R. Calvert
O. U. Chenowith
G. R. Clayton
Ira Cole
A. B. Coyner
W. T. Cox
F. S. Crockett
C. V. Davisson
Edward C. Davidson
G. R. Donahue
M. J. Eaton
Russell A. Flack
M. G. Frasch
Thos. G. Graham
O. E. Griest
Frank Hall
G. W. Herrold
L. J. Holladay
F. P. Hunter
Charles Hupe (H)
R. G. Ikins
Chas. B. Kern
H. E. Klepinger
Manson M. Lairy
H. J. Laws
Guy P. Levering
F. A. Loop
F. A. Loop, Jr.
H. G. Martin
C. C. McArdle
D. C. McClelland
D. H. McKinney
Adah McMahan
John S. Morrison
J. F. Openshaw
Samuel Pearlman
F. L. Pyke
Frank W. Ratcliff
Wm. M. Reser
F. T. Romberger
C. H. Rommel
Bertha Rose
C. L. Rowland
E. B. Ruschli
James E. Ryan
A. W. Schreiber
J. W. Shafer
L. O. Sholty
Harper G. Sichler
L. C. Smith
Edward Stahl
J. W. Strayer
H. N. Swezey
G. A. Thomas
Geo. R. Tubbs
E. L. Van Buskirk
Earl VanReed
W. W. Washburn
R. B. Wetherill (H)
C. M. Wray

West Lafayette
H. H. Ash
J. C. Burkle
Claire E. Healey
Louise J. Meikle,
S. J. Miller

Battle Ground
Frank M. Biddle

Romney
O. L. McCay
E. T. Mitchell

Clark's Hill
H. M. Mugg

West Point
Carl J. Trout

Colburn
Robert H. Wagoner

TIPTON COUNTY

Tipton
A. E. Burkhardt
B. A. Burkhardt
J. V. Carter
R. L. Fullerton
H. E. Grishaw
G. H. Warne

Windfall
B. V. Chance
E. B. Moser

Goldsmith
S. M. Cotton

Sharpsville
H. B. Shoup

Kempton
Albert E. Stouder

VANDERBURGH COUNTY

Evansville
R. R. Acre
A. E. Allenbaugh
C. S. Baker
Herman Baker
J. S. Baker
I. C. Barclay
William E. Barnes
Bruce H. Beeler
Stella Boyd
C. R. Buikstra
Wm. C. Caldwell
Grace Caufman
A. F. Clements
Walter R. Cleveland
Wm. F. Cleveland (H)
Herman Combs
Pearl B. Combs
William L. Cole
W. H. Coleman
Earl Conover
Paul D. Crimm
C. W. Cullnane
W. L. Daves
Wm. D. Davidson
W. R. Davidson
E. K. Denzer
H. S. Dieckman
Thomas Dobbins
H. S. Dome
Geo. C. Dunlevy
M. S. Durkee
W. S. Ehrich
G. H. Espenlaub
Henry J. Faul
Dallas Fickas
W. H. Field
E. L. Fitzsimmons
C. J. Folz
Wm. G. French
L. E. Fritsch
H. M. Garrison
G. B. Grim
John H. Hare
F. Minton Hartz
Wm. F. Healy
Albert Heard
Jos. M. Heberer
C. C. Herzer
Warren W. Hewins
J. N. Jerome
G. C. Johnson
Stephen L. Johnson
H. M. Kauffman
R. L. Kleindorfer
Bleeker Knapp
Shirley C. Lang
C. S. Laubscher
Clarence Laubscher
S. R. Laubscher
C. E. Laughlin (H)
W. J. Laval
Chas. F. Leich
Ermil Leslie
Jesse R. Logan
Harold D. Lynch
Paul Lynch
Pierce MacKenzie
E. F. Magenheimer
D. V. McClary
W. E. McCool
J. D. McDonald
J. H. McCool
Walter McDowell
Leonard K. McMurty
C. G. Macer
K. T. Meyer
Milton Miller
Minor Miller
Victor H. Mino
Adeline F. Muelchi
Henry Nenneker
A. E. Newman
J. W. Phares
Walter Pollard
Julian Present
Bernard Ravdin
Marcus Ravdin
T. F. Reitz
Isador Raphael
Clifford Richey
Geo. M. Royster
H. C. Ruddick
Chas. P. Schneider
Chas. L. Seitz
Darwin Short
W. R. Springstun
Harmon L. Stanton
O. C. Stephens
Urban Stork
Chas. C. Sutter
D. G. Tweedall
G. B. Underwood
Victor Varner
Robert W. Viehe
John W. Visher
Edgar H. Weber
H. G. Weiss
J. E. Welborn
J. Y. Welborn
Charles F. Willis
J. H. Willis
Ralph Wilson
S. W. Wishart
W. P. Woods
J. F. Wynn
C. W. Yeck
P. E. Yunker

Armstrong
Wm. M. Wilhelmus

VIGO COUNTY

Riley
C. M. DuPuy
Virgil French
Norman Silverman

Terre Haute
O. O. Alexander
Orris T. Allen
W. C. Anderson
C. W. Asbury
W. D. Asbury
E. R. Baldridge
W. O. Baldridge
H. L. Bernheimer
M. J. Bohannon
Henry W. Bopp
E. B. Boots
Stephen C. Bradley
Paul J. Bronson
A. L. Cabell
A. H. Caffee
G. C. Carpenter
A. W. Cavins
Chas. N. Combs
Stuart R. Combs
G. C. Congleton
J. O. Conklin
J. J. Connelly
J. H. Cook
W. G. Crawford
O. G. Cruikshank
Claude A. Curry
J. E. Dailey
R. J. Danner
H. B. Decker
James E. Donnelly
Robt. E. Downing
Rudolph Duenweg
Eugene Eisenlohr
D. H. Forsyth
J. E. Freed
J. O. Garrigus
D. A. Gerrish
Ivan Gilbert
John R. Gillum
R. G. Harkness
E. R. Haslem
John R. Haslem
J. H. Hauck
D. A. Hoover
J. J. Hoover
Edgar J. Hunt
W. B. Hunt
B. M. Hutchings
F. H. Jett
A. F. Knoefel
Joseph Kunkler
Wm. C. Kunkler
C. Russell LaBier
Clarence R. LaBier
A. H. Lee
C. L. Luckett
L. A. Malone
E. L. Mattox
E. C. McBride
Noel S. McBride
F. G. McCarthy
W. C. McCormick
James W. McEwen
D. B. Miller
W. H. Miller
Albert M. Mitchell
James J. Moorhead
H. M. Mullikin
G. G. Musselman
E. O. Nay
E. S. Niblack
H. J. Pierce
C. E. Ragan
A. E. Rhein
James V. Richart
Floyd Riggs

Gerald Ruhn
F. E. Sayers
Edw. J. Schott
Etta B. Selsam
V. A. Shanklin
Louis Siebenmorgen
I. H. Sloss
S. A. Smoots
James Spigler
O. R. Spigler
W. E. Stewart
Daniel S. Strong
John M. Sullivan
F. A. Tabor
G. J. Thomson
M. C. Topping
D. R. Ulmer
Arnold Utterback
C. R. Van Arsdall
H. R. Vandivier
M. B. Van Cleave
Edward C. Voges
Frank L. Wedel
J. H. Weinstein
F. E. Wiedemann
B. G. R. Williams
Fred Wilson
Charles Wyeth
Franklin Young
J. Rudolph Yung
E. T. Zaring

Fontanet
Eugene Schumaker

Seelyville
C. S. Carmichael

New Goshen
J. B. Loving

Prairie Creek
J. R. Wilson

WABASH COUNTY

North Manchester
Z. M. Beaman
O. G. Brubaker
Joy F. Buckner
L. Z. Bunker
Lucille Carman
Chas. E. Cook
F. S. Kitson
Chas. K. Neher
I. E. Perry
G. W. Seward
J. L. Warvel

Wabash
J. T. Biggerstaff
L. E. Jewett
Minnetta Jordan
G. M. LaSalle
R. M. LaSalle
R. A. Naugle
Ed Pearson
Wm. Pearson
Arthur P. Rhamy
A. J. Steffen
J. W. G. Stewart
N. H. Thompson
F. M. Whisler

Roann
James G. Kidd

Lagro
M. E. Renner

LaFontaine
J. L. Walker

Boonville
Bowen Hoover
J. G. Hoover
Charles F. Martin
C. L. Luckett

Newburgh
C. J. Munns
Chas. M. Wilhelmus

WASHINGTON COUNTY

Salem
Donald Colglazier
Irvin Huckleberry
J. I. Mitchell
Claude B. Paynter
L. W. Paynter

Pekin
Wm. L. Green

Campbellsburg
Thos. K. Tower

WAYNE-UNION COUNTIES

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Paul G. Hill
C. E. Kenyon

Liberty
Franklin T. Dubois
James F. Lewis
W. B. McWilliams
W. A. Thompson

Richmond
Hubert E. Allen
W. E. Ballenger
Paul W. Blossom
C. S. Bond
F. P. Buche
J. C. Clawson
Frank H. Coble
C. E. Duffin
Volney N. Fackler
V. C. Griffis
Harvey Hadley
F. E. Hagie
Carl Harmon
Gladys H. Harmon
George R. Hays
R. L. Hiatt
Curtis R. Hoffman
E. E. Holland
C. J. Hufnagel
Gayle J. Hunt
George B. Hunt
Paul S. Johnson
E. F. Jones
F. E. Keith
Jos. H. Kinsey
F. W. Krueger
S. C. Markley
Elwood J. Meredith
W. L. Misener
H. P. Ross
L. F. Ross
Richard Schillinger
Robt. A. Staff
Allen Stamper
W. R. Taylor
Horace Wanninger
Arthur J. Whallon
Mary Wickens
Thomas Wilken
G. H. Wisener
M. W. Yencer

Centerville
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Oliver P. M. Ford

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Leon T. Cox

Milton
Edgar C. Denny

Hagerstown
Chester A. Marsh
William Miller

Dublin
Leslie Wilson

WELLS COUNTY

Bluffton
H. D. Brickley
Chas. E. Caylor
Harold D. Caylor
Truman E. Caylor
Max. M. Gitlin
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Benj. F. Pence

South Whitley
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W. Ernest Wilkin

Churubusco
J. H. Briggs

Larwill
E. A. Hershey
L. W. Tennant

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R. F. Annis, Wiggins, Miss.—Tippecanoe
M. R. Bascomb, Calumet City, Ill.—Lake
G. G. Campbell, Liberia, Africa—Lake
R. M. Campbell, Oak Park, Ill.—Tippecanoe
R. L. Compton, Greenup, Ky.—Ripley
L. T. Cox, Milwaukee, Wis.—Ripley
A. J. Cramp, Ft. Lauderdale, Fla.—Porter
L. L. Culp, Minneapolis, Minn.—Allen
Herbert E. Dester, Basna, C. P., India—Marion
L. J. DeSwarte, Detroit, Mich.—Decatur
Jos. Diamondstein, Calumet City, Ill.—Lake
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D. E. Engle, Rochester, Minn.—Morgan
E. B. Gall, Cleveland, Ohio—Ripley
John E. Graf, Chicago, Illinois—Marion
W. H. Hawley, College Corner, Ohio—Union
Claude D. Holmes, Manila, P. I.—Marion
G. H. Ingram, North Little Rock, Ark.—Grant
P. K. Knoefel, Louisville, Ky.—Vigo
R. W. Kraft, Mt. Vernon, Ohio—Tippecanoe
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John A. Little, Evanston, Ill.—Cass
H. F. Machlan, Washington, D. C.—Marion
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Marjorie G. Morrison, Detroit, Mich.—Hendricks
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Veronica Pennington, Portal, Ariz.—St. Joseph
Minerva B. Pontius, Ann Arbor, Mich.—Vanderburgh
Walter H. Reitz, Cowden, Ill.—Vanderburgh
R. R. Richardson, Boston, Mass.—Tippecanoe
F. F. Shepard, College Corner, Ohio—Wayne-Union
L. W. Smith, Columbus, Ohio—Wabash
J. S. Sprague, Aspinwall, Pa.—St. Joseph
Chas. E. Stone, Salmon, Idaho—Lawrence
A. B. Thompson, Milwaukee, Wis.—Spencer
R. R. Tracht, Minneapolis, Minn.—Lake
E. H. Warnock, Hartford, Conn.—Jasper-Newton
Omer Wooldridge, Lake Worth, Fla.—Bartholomew
L. G. Zerfas, London, England—Marion

PAY YOUR 1938 DUES NOW

AVOID DELINQUENCY

DEATHS

ROBERT A. MILLIKEN, M.D., of Little Rock, Arkansas, died November first, aged forty-six years. Dr. Milliken was a former resident of Indianapolis where he had practiced for many years until in 1934 when he went to Little Rock to accept a position as director of the Crippled Children's Division of the Arkansas Welfare Department, and was assistant professor of orthopedic surgery in the University of Arkansas School of Medicine. Dr. Milliken was a graduate of Harvard University Medical School in 1918. He was a former member of the Indianapolis Medical Society and of the Indiana State Medical Association, and was a Fellow of the American Medical Association.

JACOB ADER, M.D., of Hobart, died November thirteenth, aged forty-seven years. Dr. Ader was a graduate of the Indiana University School of Medicine in 1916. He was a member of the Lake County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

HUGH T. MONTGOMERY, M.D., of South Bend, died November eighth after a long period of ill health. Dr. Montgomery was eighty-seven years old, and was one of the pioneer physicians of South Bend, having organized what is now the St. Joseph County Medical Society. He was an active worker in his profession and held many positions, including that of coroner of St. Joseph County for two terms. He graduated from the Northwestern University School of Medicine at Chicago in 1875, and had been a member of the Indiana State Medical Association since 1876. He was made an honorary member in 1933. He was also a member of the St. Joseph County Medical Society, the American Medical Association, the Indiana Academy of Science, the Indiana State Historical Society, and the Michigan Archeological Society.

CAPOLIS L. BLUE, M.D., of Tocsin, was found dead in his automobile, November seventh. Dr. Blue was sixty-eight years old, and had been in poor health for some time. He graduated from the Fort Wayne Medical College in 1898 and had practiced medicine in the vicinity of Tocsin for the past forty years. He was a member of the Wells County Medical Society, the Indiana State Medical Association, and the American Medical Association.

GEORGE W. WILLEFORD, M.D., retired physician of Indianapolis, died November fourteenth, at the age of ninety. He graduated from Northwestern University School of Medicine in 1874, and was a former member of the Daviess-Martin County Medical Society and the Indiana State Medical Association.

NEWS NOTES

Dr. Lowell R. Stephens has moved to Covington, Indiana, from Southport.

Dr. Anna Goss and Dr. O. A. Turner of Madison were married October 27th in Madison.

Dr. Victor C. Heiser, author of "An American Doctor's Odyssey," spoke at Caleb Mills Hall in Indianapolis, November 8th. Dr. Heiser's lecture was sponsored by St. Margaret's Hospital Guild.

Dr. W. D. Little of Indianapolis gave an address on cancer control before a public meeting at the Methodist church in Linton, November 10th. The meeting was sponsored by the Greene County Federated Clubs.

Dr. Arthur Rhamy has resumed his practice in Wabash after an absence of several weeks due to illness.

Dr. Gregory F. Lukianoff has joined the staff of the Fort Wayne Medical Laboratory as associate pathologist to Dr. B. W. Rhamy.

Dr. C. J. Aucreman of Hartford City has moved to Montpelier, where he will conduct a general practice.

Dr. C. B. Southard and family have moved from Indianapolis to Cloverdale where Dr. Southard is associated in practice with Dr. Clyde Gray.

The marriage of Miss Agnes Knierim and Dr. T. M. Weaver, both of Brazil, was solemnized November 10th.

Dr. and Mrs. A. Owen, both physicians, of Indianapolis, have leased a home in Williamsport, where they have opened offices for the practice of medicine.

Dr. George E. Denny of Madison has been appointed superintendent of the Muscatatuck Colony for Feeble-Minded at Butlerville.

Dr. Douglas W. Owen has sold the St. Joseph Valley Sanitarium at South Bend to Dr. and Mrs. L. E. Pennington.

Mr. Henry Kendall Mulford, founder of the company which bore his name, died October 15, 1937, at the age of 71 years.

Miss Virginia Dickman of Evansville and Dr. W. Russell Springstun of Evansville were married, October 17th, in Evansville.

Hoffmann-LaRoche, Inc., have announced the formation of The Roche-Organon Company. Plans recently were completed for this collaboration of the Organon Laboratories of Holland with Hoffmann-LaRoche, Inc., of Nutley, New Jersey.

Dr. Don A. Bartley, of Indianapolis, has resumed his practice of ophthalmology after an illness of four months. Dr. Bartley is now located at 706 Hume Mansur Building. He was for the past sixteen years associated with Dr. W. F. Hughes.

Members of the Indiana State Advisory Health Council held their semi-annual meeting on November seventeenth at the Riley Hospital in Indianapolis. The program included addresses by Dr. W. D. Gatch, dean of the Indiana University School of Medicine; Dr. Howard B. Mettel; Dr. Exie E. Welsch, and Dr. Verne K. Harvey.

The American Society for the Advancement of Science will meet in Indianapolis December 28, 29 and 30. Some of the meetings will be held in the library of the Indiana University Medical Center, and the library rooms will be given over to the meeting. The reading room will be closed to students and others during that time, although books may be borrowed as usual.

The Hutcheson Nurses' Home, a unit of the Putnam County Hospital in Greencastle, was opened formally in October and presented to the nursing staff of the institution. The residence is a $30,000 home, and includes fifteen private rooms for nurses, a superintendent's suite, living room, solarium, lounge, dining room, kitchen and utility rooms. The home is the gift of Dr. and Mrs. W. R. Hutcheson.

A corporation has been formed in Chicago under the name of The Indianapolis Plan, Inc., for the purpose of dealing in bills, debts, notes, open accounts, etc. We have had some inquiry from Indiana physicians concerning the relation of this company and the Medical and Dental Business Bureau of Indianapolis. The Bureau has nothing whatsoever to do with the Chicago "Indianapolis Plan, Inc."

At the meeting of the Union District Medical Association, held in Brookville, October 28th, Dr. E. T. Storer of Middletown, Ohio, was elected president, succeeding Dr. E. C. Denny of Milton, Indiana. Dr. H. H. Smith of Oxford was made vice-president, and Dr. R. S. Sapppenfield of Brookville was re-elected secretary-treasurer. Liberty, Indiana, was selected as the place for the next meeting, to be held May 26, 1938.

General John J. Pershing has accepted chairmanship of the American Social Hygiene Association's National Anti-Syphilis Committee, which plans to obtain $500,000 for the continuance and expansion of its educational program in social hygiene. Indianapolis residents who are members of the national committee are Dr. Thurman B. Rice, William Fortune and Felix McWhirter.

Newspapers for October 26th carried announcements concerning the opening of an institute for cancer research and instruction in its treatment in Chicago, March 1, 1938. The institute was endowed entirely by Chicagoans' contributions, and its staff will include Dr. Henry Coutard of the Curie Institute of France, Sir George L. Cheatle of London, Dr. A. H. Compton of the University of Chicago, Dr. Ludvig Hektoen of Chicago and Dr. Max Cutler of Chicago. Further information concerning the institute probably will be available as the time approaches for its opening.

The next examination for Group B candidates of the American Board of Obstetrics and Gynecology will be held in various cities of the United States and Canada on Saturday, February 5, 1938. Application for admission to this examination must be made on an official application form and filed in the office of the secretary at least sixty days prior to this date. The general, oral, clinical and pathological examinations for all candidates (groups A and B) will be conducted by the entire Board, meeting in San Francisco, California, on June 13 and 14, 1938, immediately prior to the meeting of the American Medical Association. Application for admission to the June, 1938, examinations must be on file in the secretary's office before April 1, 1938. Further information and application blanks may be obtained from the secretary, Dr. Paul Titus, 1015 Highland Building, Pittsburgh (6), Pennsylvania.

Dr. James B. Maple of Sullivan has been appointed historian for the Indiana State Medical Association to succeed Dr. L. G. Zerfas, who has resigned.

Dr. E. V. Hahn and Dr. Paul Merrell have announced the removal of their offices from the Underwriters Building to 914 Hume Mansur Building in Indianapolis. Dr. Hahn is specializing in neurological surgery.

The report on group hospitalization prepared by the Bureau of Medical Economics of the American Medical Association has been published in book form, paper bound, 5½x8½ inches, and may be obtained for 75c from the American Medical Association, 535 North Dearborn Street, Chicago.

The Nursing Information Bureau of the American Nurses' Association has available two vocational pamphlets for use by physicians or others who are asked about nursing schools and the nursing profession. They are designed for high school and college students interested in nursing and discuss the opportunities of the nursing profession. The pamphlets are entitled "Nursing and How to Prepare for It" and "Nursing—A Profession for the College Graduate." Copies may be obtained from the executive secretary of the Indiana Nurses Association, 717 Circle Tower, Indianapolis.

At the semi-annual meeting of the Third District Medical Society, held in New Albany, November 10, Dr. John Mitchell of Salem was elected president, Dr. Henry C. Knapp of Huntingburg was made vice-president and Dr. Ivan Clark of Paoli was elected secretary-treasurer. The meeting was attended by forty physicians from Floyd, Clark, Scott, Harrison, Crawford, Orange, Washington, Lawrence and Dubois Counties. Dr. Herman M. Baker of Evansville was the principal speaker. The next meeting of the organization will be held at French Lick next spring.

The Union District Medical Association met October 28 at the Public Library in Brookville, Indiana. In the forenoon, Dr. E. C. Denny of Milton, the retiring president, read a paper entitled "Four-Fifths of All Physicians." Dr. John Skavlem of Cincinnati, Ohio, discussed "Chronic Non-Tuberculosis Lung Infections," and Dr. A. Graeme Mitchell of Cincinnati, Ohio, read a paper entitled "What I Don't Know About Endocrines." In the afternoon, Dr. C. O. McCormick of Indianapolis talked on "Analgesia in Labor," and Dr. Howard Stitt of Cincinnati discussed "Recent Advances in Rhinology and Otolaryngology." There were forty-four present at this meeting. The next meeting, which will be the 140th semi-annual meeting, will be held in Liberty, April 28, 1938.

The Woman's Auxiliary of the Marion County Medical Association held a "Hobby Fair" at the John Herron Art School in Indianapolis to show what doctors do with their odd moments. Dr. E. F. Kiser's historically valuable medical books, which he has been collecting for many years, were on display. Dr. Goethe Link is interested in astronomy and has a collection of astronomical instruments and books. At present he is building his own observatory and his telescope, now being manufactured, will have a thirty-six-inch mirror and will be the largest in the State. Dr. Fletcher Hodges is interested in heraldry, and exhibited coats of arms of the families of Cleveland, Lancaster and Springfield, members of his family who have founded cities which were named for them. Dr. Sidney Hatfield is a woodworker and makes all kinds of toy automobile trailers, household gadgets and lawn furniture. Dr. Thurman B. Rice's stamp collection contained some of the world's most beautiful stamps. Dr. A. F. Weyerbacher and his sister collect old pewter and have beakers and bowls from Austria, Italy and England, all over 100 years old. These are but a few of the hobbies that were exhibited. Some physicians are interested in magic, airplane and ship models, linoleum and wood cutting.

U. S. CIVIL SERVICE EXAMINATIONS

The United States Civil Service Commission announces open competitive examination for the position of Associate Biochemist (syphilis research) for the U. S. Public Health Service. Applications must be on file with the U. S. Civil Service Commission at Washington, D. C., not later than December 28, 1937. Necessary forms may be obtained from the Secretary, Board of United States Civil Service Examiners, at any first-class post office, or from the United States Civil Service Commission at Washington, D. C.

Open competitive examinations also will be held for the positions of Principal Specialist in Maternal and Child Health, Senior Specialist in Maternal and Child Health, Specialist in Maternal and Child Health, and Associate in Maternal and Child Health for the Children's Bureau of the Department of Labor. Applications for these positions must be on file with the United States Civil Service Commission at Washington, D. C., not later than December 28, 1937, and application forms may be obtained as mentioned in the paragraph above.

SCIENTIFIC EXHIBIT OF A. M. A. AT SAN FRANCISCO

Application blanks are now available for space in the Scientific Exhibit at the San Francisco Session of the American Medical Association, June 13-17, 1938. The Committee on Scientific Exhibit requires that all applicants fill out the regular forms.

Application blanks may be obtained from the Director, Scientific Exhibit, American Medical Association, 535 North Dearborn Street, Chicago, Illinois.

GOLFERS' SPECIAL TO SAN FRANCISCO

Golfers who plan to attend the American Medical Association meeting in San Francisco next June will be interested in the "Golfers' Special" train which is scheduled to leave New Orleans about a week before the meeting. Stops will be made at Houston, Galveston, and San Antonio, Texas; while in California, Los Angeles and Del Monte will be visited. On the return trip, golfing stops will be made at Portland, Seattle, Vancouver, Lake Louise, Banff, Minneapolis and St. Paul. Those interested may address Bill Burns, 2020 Olds Tower, Lansing, Michigan, who is secretary of the American Medical Golf Association.

HOTELS FOR 1938 A. M. A. MEETING IN SAN FRANCISCO

The Board of Trustees of the American Medical Association has appointed Dr. Howard Morrow, of San Francisco, as general chairman of the local committee on arrangements. Doctor F. C. Warnshuis has been appointed chairman of the local committee on hotels. Fellows are asked to send in their requests for hotel accommodations to Dr. Warnshuis, suite 2004, 450 Sutter Street, San Francisco, California, giving names of members in party, type of accommodations desired, time of arrival and departure. Do not write directly to any hotel as *all* reservations will be cleared through the hotel committee. Early reservations are requested to avoid confusion and to insure individual choice.

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE SYMPOSIUM ON SYPHILIS

The American Association for the Advancement of Science will hold its annual meeting in Indianapolis, December 27 to January 1. The section on medical sciences will meet in the ball room of the Hotel Antlers, December 28, 29, and 30, and the entire session will be devoted to a symposium on syphilis. The announced program (following) is an outstanding one, and seems to cover the field very thoroughly. Indiana physicians will be welcome at the meetings.

* * * * *

Tuesday Morning, December 28, 10:00 A. M.

1. The European Origin of Syphilis. Richmond C. Holcomb, Upper Darby, Pennsylvania.

2. The American Origin of Syphilis. William Allen Pusey, University of Illinois College of Medicine, Chicago, Illinois.

3. Syphilis and Yaws, One Disease. Charles S. Butler, Naval Medical Center, Washington, D. C.

4. Syphilis and Yaws, Two Diseases. Howard Fox, New York University College of Medicine, New York City.

5. *Spirochaeta pallida* and the Etiology of Syphilis. Norman R. Ingraham, Jr., University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania.

6. *Spirochaeta pallida* So-called Life Cycles and Granular Stages. Richard E. Olsen, Pontiac General Hospital, Pontiac, Michigan.

Tuesday Afternoon, December 28, 2:00 P. M.

7. The Inter-relationship of *Sp. pallida*, *Sp. pertenue* and *Sp. cuniculi*. Thomas B. Turner, Johns Hopkins University School of Hygiene and Public Health, Baltimore, Maryland.

8. The Experimental Transmission to Animals and the Diseases Produced. Louise Pearce, Rockefeller Institute for Medical Research, New York City.

9. The Problem of Treatment Resistant Strains. Herman Beerman, University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania.

10. Immunity. Jarold E. Kemp, Public Health Institute, Chicago, Illinois.

11. Recent Advances in the Pathology of Syphilis. Henry E. Michelson, University of Minnesota School of Medicine, Minneapolis, Minnesota.

Wednesday Morning, December 29, 10:00 A. M.

12. Neurosyphilis. Paul O'Leary, The Mayo Clinic, Rochester, Minnesota.

13. Syphilis in Pregnancy. Alfred C. Beck and W. T. Daily, Long Island College of Medicine, Brooklyn, New York.

14. Congenital Syphilis. Charles C. Dennie, University of Kansas School of Medicine, Lawrence-Kansas City, Missouri.

15. Cardiovascular Syphilis. Roy W. Scott, City Hospital, Cleveland, Ohio.

16. Diagnosis — Clinical. Francis E. Senear, University of Illinois College of Medicine, Chicago, Illinois.

Wednesday Afternoon, December 29, 2:00 P. M.

The Theobald Smith Award in Medicine. Presentation. Address. Robley D. Evans, Massachusetts Institute of Technology, Cambridge, Massachusetts.

17. The Complement-Fixation and Precipitation Tests. Frank W. Hartman and Elizabeth Yagle, Henry Ford Hospital, Detroit, Michigan.

18. The Outstanding Features of the Kahn Antigen. Reuben L. Kahn, University of Michigan Hospital, Ann Arbor, Michigan.

19. The Outstanding Feature of the Kline Antigen. Benjamin S. Kline, Mount Sinai Hospital of Cleveland, Cleveland, Ohio.

20. Serological Reactions in Relation to Infection and Treatment of Syphilis. John Kolmer, Research Institute of Cutaneous Medicine, Philadelphia, Pennsylvania.

Thursday Morning, December 30, 9:30 A. M.

21. Treatment, Specific and Non-Specific. Harry C. Solomon, Harvard Medical School, Cambridge, Massachusetts.

22. High Temperatures. Walter M. Simpson, Kettering Institute for Medical Research, Miami Valley Hospital, Dayton, Ohio.

23. Arsenicals, Experimental Evaluation. Arthur L. Tatum, Service Memorial Institute, University of Wisconsin, Madison, Wisconsin.

24. Arsenicals, Clinical Evaluation. Lester W. Wieder, Bankers Building, Milwaukee, Wisconsin.

25. The Direct Spirochaetostatic and Spirochaetocidal Action of the Arsphenamines on *Sp. pallida*.

Harry Eagle, Johns Hopkins Hospital, Baltimore, Maryland.

26. Untoward Reactions—Constitutional. Rudolph H. Kempmeier, Vanderbilt University School of Medicine, Nashville, Tennessee.

27. Untoward Reactions — Intercurrent Infections. Dudley C. Smith, University of Virginia Hospital, University, Virginia.

28. General Considerations. Udo J. Wile, University of Michigan School of Medicine, Ann Arbor, Michigan.

Thursday Afternoon General Session, Dec. 30, 4:30 P. M.

Tuberculosis, Leprosy and Allied Mycobacterial Infections. Dr. Esmond R. Long, Director, Henry Phipps Institute, Philadelphia, Pennsylvania.

Thursday Evening General Session, Dec. 30, 8:15 P. M.

29. Syphilis: A Public Health Problem. Dr. Thomas Parran, Surgeon General, United States Public Health Service, Washington, D. C.

In addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories
Ampoules Procaine Hydrochloride Solution, 2%, 100 c.c.

Armour & Co.
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Ernst Bischoff & Co., Inc.
Aminophyllin—Bischoff
Tablets Aminophyllin—Bischoff, 0.1 gm. (1½ gr.).

Flint Eaton & Co.
Calcium Gluconate Effervescent—Flint.

Gane & Ingram, Inc.
Sulfanilamide.

Eli Lilly & Co.
Merthiolate Suppositories 1:1000.

National Biological Distributors, Inc.
Bismuth Subsalicylate in Oil.

Parke, Davis & Co.
Sulfanilamide
Tablets Sulfanilamide, 5 gr.
Staphylococcus Toxoid.

Rare Chemicals, Inc.
Gitalin (Amorphous).

Sharp & Dohme
Ephedrine
Ephedrine Hydrochloride
Capsules Ephedrine Hydrocloride, ⅜ gr.
Solution Ephedrine Hydrochloride, 3%.
Ephedrine Sulfate
Ampoules Ephedrine Sulfate, ¾ gr.
Capsules Ephedrine Sulfate, ⅜ gr.
Capsules Ephedrine Sulfate, ¾ gr.
Solution Ephedrine Sulfate, 3%.
Ampoules Bismuth Subsalicylate, 2 gr. in Oil, 1 c.c.
Bismuth Subsalicylate in Oil, 2-ounce bottle.

E. R. Squibb & Sons
Elixir Ipral Sodium
Staphylococcus Toxoid.

INDIANA UNIVERSITY NEWS NOTES

Pictures of interest in the medical education history of Indiana have been presented to the library of the Indiana University Medical Center, Indianapolis, by Dr. James H. Taylor of Indianapolis, it was announced this week by Allan Hendricks, librarian. The group includes a photograph of the nine men who composed the last faculty of the Indiana Medical College that was organized in Indianapolis in 1869, and which was combined with the College of Physicians and Surgeons in 1878 to form the Medical College of Indiana.

The picture includes Dr. John Chambers, Dr. Charles E. Wright, Dr. William M. Bullard, Dr. Roland T. Brown, Dr. George W. Mears, Dr. Thomas B. Harvey, Dr. John A. Comingor, Dr. W. B. Fletcher and Dr. Joseph W. Marsee. The picture is signed by each of the doctors.

Dr. William N. Wishard has presented to the library a large half-tone engraving showing on one sheet the faculty, the school building, various clinics and other views of the later Indiana Medical College that was, from 1905 to 1908, the medical department of Purdue University. Dr. Wishard also has given to the I. U. Medical Center a photograph of the building of the medical department of LaPorte University, erected about 1840, also a group photograph of the faculty of that institution, the first important medical school in Indiana. Librarian Hendricks has also announced a gift of nearly 75 volumes of medical works from Dr. George C. Fisher and Dr. E. S. Knox, both of Indianapolis.

Acting President Herman B. Wells held open house Sunday, Oct. 17, for faculty members of the Indiana University Medical Center in Indianapolis and the Medical School in Bloomington. Members of the medical, nursing, dentistry, social service division, the extension division faculty and the Riley Memorial executive committee attended.

Approximately 4,000 volumes are included in the library on the second floor of the new School of Medicine building on the Indiana University campus at Bloomington. The library is the combined libraries of the anatomy, physiology and hygiene departments of the University. This well lighted and comfortably furnished reading room, containing current numbers of journals pertaining to anatomy, physiology and hygiene, provides a place for study and reference work. The library is available to medical students, students taking courses in the building and advanced students and staff members of related departments.

THE JOURNAL

of the

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

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ISSUED MONTHLY

Under the Direction of the Council

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Human Body, (Clendening) Alfred A. Knopf 558
Hygiene, Personal (Turner) C. V. Mosby Co. 370
Infantile Paralysis and Cerebral Diplegia (Kenny) Angus and Robertson 370
Industrial Hygiene and Medicine, Recent Advances in (Ling) P. Blakiston's Son and Co. 558
Infants and Children, Diseases of (Griffith-Mitchell) W. B. Saunders 226
International Clinics. Vol. I, II and III, 47th series. J. B. Lippincott 336, 370, 558
Light Therapy (Krusen) Paul B. Hoeber 226
Marriage, Emotional Adjustment in (Clark) C. V. Mosby Sept. xxx
Maternal Care (Adair) University of Chicago Press Aug. xxii

Materia Medica, Toxicology and Pharmacognosy (Mansfield) C. V. Mosby 226
Medical Classics (Kelly) Williams and Wilkins Feb. xxiv
Medical Formulary (Thornton) Lea and Febiger 273
Medical Morals and Manners (Royster) Univ. of No. Carolina Press 176
Medicine, Practice of (Meakins) C. V. Mosby Co. (r) Feb. xxiv
Medicine, Textbook of (Emerson) J. B. Lippincott Co. (r) 370
Mental Therapy (London) Covici-Friede Dec. xxviii
Nursing, Obstetric and Gynecologic (Falls) C. V. Mosby Sept. xxx
Nursing, Psychiatric (Sadler) C. V. Mosby 558
Nursing, Textbook of Surgical (Brookes) C. V. Mosby Co. Aug. xxii
Nutritional Values of Canned Foods. American Can Co. 226
Nutritive Aspects of Canned Foods. American Can Co. Aug. xxii
Obstetrical Guide-Book, Temple University (Arnold) Corson Pub. Co. (r) Dec. xxvi
Obstetric Difficulties, Management of (Titus) C. V. Mosby 176
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Orthopaedic Surgery, Handbook of (Shands-Raney) C. V. Mosby 273
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Physical Diagnosis (Sutton) C. V. Mosby Co. Aug. xxii
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Physiological Basis of Medical Practice (Best) Wm. Wood and Co. 176
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Practice, Introduction to General (LeFleming) Wm. Wood and Co. 226
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Treatment, Methods of (Clendening) C. V. Mosby Dec. xxviii
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Urology, Medical (Koll) C. V. Mosby Sept. xxx
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A. M. A. ACTS ON MEDICAL SERVICE PROPOSALS

(Continued from Page 647)

communication to county society secretaries in regard to the signing of these proposals.

Newspapers of Sunday, November 7, throughout the nation carried a release in regard to the principles and proposals for medical care presented by "The Committee of Physicians."

Four hundred and thirty physicians have subscribed to these proposals and we understand that copies have been sent to a number of physicians in this state and to county medical societies for consideration and action.

These proposals are in the main those which were presented by the New York State Medical Society to the House of Delegates of the American Medical Association at the annual meeting last June at Atlantic City and did not receive the approval of the House.

The Executive Committee of the Indiana State Medical Association considered this matter at its regular monthly meeting on November 7. As all the members of the committee had not received a copy of the proposals, the Executive Committee felt that it should not make any recommendations concerning these proposals until it has had the opportunity of studying them.

The Committee suggests that before taking any stand in regard to this matter that these proposals be given the most careful study by each county medical society which has received them. The committee would be very pleased to have any suggestions from the various county medical societies as to the feeling of the physicians in each society concerning the proposals and principals of "The Committee of Physicians."

Dr. Olin West has sent the following telegram to state medical societies:

"COMMUNICATIONS FROM VARIOUS SOURCES ARE BEING ADDRESSED TO MEDICAL SOCIETIES AND TO INDIVIDUAL PHYSICIANS FOR WHICH APPROVAL IS BEING SOUGHT STOP RESPECTFULLY SUGGEST THAT ALL SUCH COMMUNICATIONS BE CAREFULLY EXAMINED IN LIGHT OF POLICIES CLEARLY DEFINED BY HOUSE OF DELEGATES OF AMERICAN MEDICAL ASSOCIATION AND WHICH HAVE RECEIVED THE SUPPORT OF CONSTITUENT STATE AND TERRITORIAL ASSOCIATIONS STOP SOME OF COMMUNICATIONS AND PROPOSALS WILL BE SUBMITTED TO BOARD OF TRUSTEES OF AMERICAN MEDICAL ASSOCIATION AT MEETING THIS WEEK AND WILL ALSO BE CONSIDERED AT CONFERENCE OF STATE SECRETARIES."

VOICE OF MEDICINE

(*Continued from Page 651*)

accepted the obligation as a matter of course. There is nothing which you would not do for her. And, this is very right. For, in a very real sense, physically, as a man, as a useful citizen, as a social human being, she made you what you are today. Now, give serious thought to Organized Medicine; for, in that very same, real sense, professionally, what you are today is and ever has been the result of the efforts, in the long, long past as well as the present, of Organized Medicine.

You are brilliant, you are successful; envied by others, you call yourself a self-made man. Partly this is true, in so far as your own individual effort is concerned; but, be not vain-glorious or self-deceived, you owe a tremendous obligation for many things which others have done for you, free-handedly, ungrudgingly, princely. Remember, too, you can not accept unselfishly without giving unselfishly.

Like the mother who bore you, like the mother who fondly suckled you at her soft breast, like the mother who diapered you, spoon-fed you, washed your grimy face and dirty ears, wiped your wet-dripping nose, slicked back your tousled hair, slapped your naughty hands, spanked your posterior anatomy when warranted, trained you to speak your first recitation, coached and supervised your education, and then with tears of joy in her eyes and a choking throb of pride and pleasure in her throat watched you graduate and become a doctor, that is how Organized Medicine has hovered over you.

Now, doctor, what is your obligation to Organized Medicine?

Floyd T. Romberger, Sr., M.D.,
Lafayette.

The Journal
wishes for all of its
subscribers and advertisers
A Merry Christmas
and A Happy Holiday
Season

SOCIETIES AND INSTITUTIONS

THE BUREAU OF PUBLICITY

September 21, 1937:

Present: William N. Wishard, M.D., chairman; F. M. Gastineau, M.D.; C. F. Thompson, M.D., and T. A. Hendricks, executive secretary.

Report on medical meeting:

Sept. 16—Second District Medical Society, Linton, Ind. "Short Talks on Association Activities." (60 present.)

The pictures of the first medical school in Indiana (LaPorte University 1842) and the copy which is to go with these pictures were brought to the attention of the Bureau. The Bureau approved the copy and ordered the pictures framed in order that they may be displayed at the annual session at French Lick and later placed in the state headquarters office.

The Bureau inspected the flood pictures which are being mounted for display at the state meeting and recommended that letters be written thanking Lieutenant Henry Langsenkamp and Donald Jameson for their contributions of important photographs taken from the air of the flooded area which have been loaned to the State Association for the display.

The August issue of the Better Business Bureau Bulletin was brought to the attention of the Bureau. The article headed, "Depilatory Faker Again in Trouble—Alfred W. Lublin, Croxonol Sales Corp., 142 W. 24th St., New York," was especially noted by the Bureau.

Letter received by the president of the Indiana State Medical Association concerning Doctor Thomas J. Cogley, a medical pioneer who lived at Madison, Indiana, brought to the attention of the Bureau. The Bureau suggested that this letter be forwarded to the secretary of the Jefferson County Medical Society.

Notice received of the formation of a speakers' bureau by the Ohio State Medical Association. The notice says that "Approximately 300 members of the State Association have been enrolled by the Speakers' Bureau and will respond to invitations to address county and district society meetings. The purpose of the Speakers Bureau is to provide a way for county societies to secure guest speakers for special occasions."

October 19, 1937.

Present: William N. Wishard, M.D., chairman; F. M. Gastineau, M.D.; C. F. Thompson, M.D., and T. A. Hendricks, executive secretary.

Following is the complete list of pre-convention releases sent to the newspapers upon the eighty-eighth annual session of the State Association held at French Lick on October 4, 5 and 6, 1937:

Sunday, September 19—General story.
Wednesday, September 22—Scientific program.
Saturday, September 25—Entertainment.
Sunday, September 26—Woman's Auxiliary.
Monday, September 27—Scientific exhibit.
Wednesday, September 29—Golf tournament.
Saturday, October 2—Out-of-town guests.
Tuesday, October 5—President's address.

Release entitled, "Hoosier Hunting Day Hints," approved by the Bureau for publication in Thursday, October 28, papers.

Report on medical meeting:

September 22—Joint meeting of Grant County Medical Society, Grant County Bar Association, and Grant County Dental Society, Marion, Indiana. Films on "Infant Feeding" and "Pregnancy" shown. (75 present.)

The picture of the LaPorte University Medical School and the faculty framed and hung in the headquarters office after being displayed at the state meeting.

The secretary was instructed to write a letter upon behalf of the Bureau of Publicity to the historian of the Association expressing regret that his services will not be available during the coming year.

The following comment of the House of Delegates in regard to the Bureau's work was brought to the attention of the Bureau:

"Your Committee on Publicity concurs in the reports of the Bureau of Publicity and the Committee on State Fair as printed in the handbook for the House of Delegates.

"The Bureau of Publicity continues to perform a very important function with the rapidly enlarging interest of the public in affairs of public health and matters pertaining to the medical profession. The committee is deserving of commendation for its effective work and again has proven the importance of carefully prepared publicity reaching the public at regular intervals."

Health article that appeared in the October Indiana Parent-Teacher bulletin entitled, "Parents, Look to Your Schools!" approved by the Bureau.

The Bureau reviewed newspaper clippings on the state meeting.

Material in regard to the broadcasts of the American Medical Association brought to the attention of the Bureau.

TWELFTH DISTRICT MEDICAL SOCIETY

The annual meeting of the Twelfth District Medical Society was held jointly with the Fort Wayne Medical Society at the Chamber of Commerce Building, November 16, 1937.

The meeting was called to order at 4:30 p. m., the president, Dr. C. E. Munk, of Kendallville, presiding.

1. Dr. E. D. Plass, Professor of Obstetrics and Gynecology, Iowa State University, addressed the Society on the subject of "Female Endocrinology." After a complete discussion of the physiology of the female reproductive organs and their relation to other glands of internal secretion, he pointed out the practical and therapeutic value of the hormones in use at the present time.

The discussion of Dr. Plass' paper was opened by Drs. Rothschild, Wilkins and Beierlein.

2. Thomas A. Hendricks, executive secretary of the Indiana State Medical Association, reviewed the Principles and Proposals for Medical Care by the "Committee of Physicians." He brought a suggestion from the Executive Commitee of our State Association that these proposals be given the most careful study by the county societies, or individuals, before taking any stand in the matter.

3. Business Meeting:

(a) Minutes of previous meeting read and approved.

(b) Election of Officers resulted as follows:

Dr. H. O. Williams, Kendallville, President.
Dr. A. V. Hines, Auburn, Vice-President.
Dr. S. R. Mercer, Fort Wayne, Sec.-Treas.
Dr. A. J. Sparks, Fort Wayne, Councilor.

4. The after-dinner address was given by Dr. Logan Clendening, Professor of Medicine, University of Kansas. He gave an illustrated lecture on the famous hospitals of the world and their place in the history of medicine.

Registrations, 135; total attendance, 210.

LOCAL SOCIETY REPORTS

BOONE COUNTY MEDICAL SOCIETY dispensed with its regular November meeting so that its members could attend the Seventh District meeting at Danville, November third.

* * *

CARROLL COUNTY MEDICAL SOCIETY members enjoyed a banquet meeting, November eleventh, at Flora. Dentists of the county were guests. Dr. John W. Graves, Indianapolis dentist, spoke on "The Relation of Dentistry and Medicine."

At the October meeting, Dr. C. P. Emerson, of Indianapolis, talked on "Mental Diseases."

CASS COUNTY MEDICAL SOCIETY and the Cass County Bar Association held a joint meeting, October twenty-eighth. Mr. Albert Stump, attorney for the Indiana State Medical Association, spoke on "The Professional Man and the Modern World."

* * *

DEARBORN-OHIO COUNTY MEDICAL SOCIETY members held a meeting October twenty-eighth at the home of Dr. J. F. Treon in Aurora. Dr. Gordon McKin, of Cincinnati, was the guest speaker.

* * *

DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY met October nineteenth at the Hotel Roberts in Muncie. Dr. Charles Botkin reported the activities of the state meeting at French Lick.

* * *

DUBOIS COUNTY MEDICAL SOCIETY held a meeting at the Ideal Hotel in Huntingburg, October twenty-second. Dr. Thurman B. Rice of Indianapolis was the principal speaker. The recently organized Auxiliary met with the society.

* * *

ELKHART COUNTY MEDICAL SOCIETY members met at the Y. W. C. A. in Elkhart, October thirteenth, for a dinner meeting, with an attendance of fifty-five. Dr. Philip Kreuscher of Chicago presented a paper on "Backache."

* * *

ELWOOD MEDICAL SOCIETY members held their regular monthly dinner meeting October nineteenth. Dr. Frank Gastineau of Indianapolis was the guest speaker.

* * *

FAYETTE-FRANKLIN COUNTY MEDICAL SOCIETY met at the McFarland Hotel in Connersville, October nineteenth, to hear Dr. C. J. Clark of Indianapolis discuss "Treatment of Heart Diseases." Attendance numbered fourteen.

* * *

FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY met at the Chamber of Commerce Building, October nineteenth. Hon. James I. Farley, representative of the Fourth Indiana District talked on "Legislation of Interest to the Medical Profession." His remarks contained the statement that he was definitely opposed to the socialization of medicine. Attendance numbered seventy-three.

At the November second meeting of the Fort Wayne (Allen County) Medical Society, held in the Chamber of Commerce Building, Dr. Paul A. O'Leary, of the Mayo Clinic, discussed "Treatment of Syphilis." Attendance numbered seventy at this meeting.

* * *

FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY held a meeting at Mudlavia Sanitarium in Kramer, November fourth, with Dr. Frank W. Peyton, of Lafayette, as principal speaker. Dr. Peyton's subject was "The Management of Abortion." Twenty-seven attended the meeting.

* * *

GIBSON COUNTY MEDICAL SOCIETY met at Princeton in the Hotel Emerson for a dinner meeting, October eleventh. Dr. J. M. Cunningham, of Indianapolis, talked on "Diagnosis and Treatment of Chronic Appendicitis." Twenty-three attended the meeting. Dr. J. W. McGowan, of Oakland City, and Dr. M. P. Hollingsworth, of Princeton, were made honorary members of the Indiana State Medical Association and were presented with honorary membership cards.

At the November eighth meeting of the Gibson County Medical Society, Drs. H. J. Pierce and R. E. Downing, of Terre Haute, discussed "Cancer—Its Diagnosis and Treatment."

Officers for 1938 were elected as follows:
President, V. H. Marchand, Haubstadt.
Vice-President, R. S. McElroy, Princeton.
Secretary-treasurer, O. M. Graves, Princeton.

GRANT COUNTY MEDICAL SOCIETY held their annual joint meeting with the Grant County Dental Society and the Grant County Bar Association at the Meshingomesia Country Club, September twenty-second. There were eighty present. A golf tournament was held in the afternoon and a barbecue dinner was enjoyed in the evening. Entertainment was provided by Hawaiian entertainers, moving pictures, and boxing matches. The golf tournament was won by the attorneys.

* * *

HAMILTON COUNTY MEDICAL SOCIETY members held their November meeting at Arcadia, November ninth. Dr. Glenn Pell, Indianapolis dentist, was the principal speaker.

* * *

INDIANAPOLIS (MARION COUNTY) MEDICAL SOCIETY met at the U. S. Veterans' Hospital, October twenty-sixth. Approximately 150 members attended. Speakers were Drs. V. F. Tremor, M. H. Sandorf, Neal Morris, and Jack Reiss.

At the November second meeting, held in the Indianapolis Athletic Club, case reports were presented. Speakers were Dr. Henry I. Berger, Dr. Russell L. Arbuckle, Dr. Paul Merrell, Dr. M. Cornacchione, Dr. Max Bahr, Dr. J. W. Wright, Dr. Paul K. Cullen and Dr. Norman R. Booher.

On November ninth, Dr. Murray DeArmond spoke on "The Mid Brain and Its Role in the Production of Clinical Symptoms." Dr. F. W. Taylor talked on "Gun Shot Wounds of the Abdomen."

* * *

JASPER-NEWTON COUNTY MEDICAL SOCIETY met at Remington, October twenty-eighth, for a dinner meeting with Dr. A. P. Rainier as host. Thirteen members and three guests were present. Dr. Robert Moore, of Indianapolis, presented an address on "Cardiovascular Emergencies."

* * *

KNOX COUNTY MEDICAL SOCIETY members held a meeting at the Jewel Cafe in Vincennes, November ninth. Dr. Howard B. Mettel, of Indianapolis, talked about "Activities of the Bureau of Maternal and Child Health." Moving pictures on "Therapeutic Practices in Pediatrics" were shown.

* * *

KOSCIUSKO COUNTY MEDICAL SOCIETY met at Warsaw in the Hotel Hays, November ninth, for a dinner meeting and committee reports. Fourteen attended.

* * *

LAKE COUNTY MEDICAL SOCIETY met November eleventh at the Mercy Hospital in Gary. Dr. Joseph Douchess, of Gary, presented a paper on "Dakinization," and Dr. Thomas Dwyer, of Gary, talked on "The Relationship and Value of the Pathologist to the Hospital."

The annual meeting of the Lake County Medical Society will be held December ninth at Phil Smidt's.

* * *

MADISON COUNTY MEDICAL SOCIETY met in Anderson, November fifteenth. Dr. W. U. Kennedy, of Newcastle, was the principal speaker, telling of his recent trip to Germany and France where he studied the problems of state medicine.

* * *

MONTGOMERY COUNTY MEDICAL SOCIETY met at the Culver Hospital in Crawfordsville, October twenty-first, for a dinner meeting. Dr. Herbert F. Call of Indianapolis talked on "Immunization." Attendance numbered thirty.

(Continued on Page xxiv)

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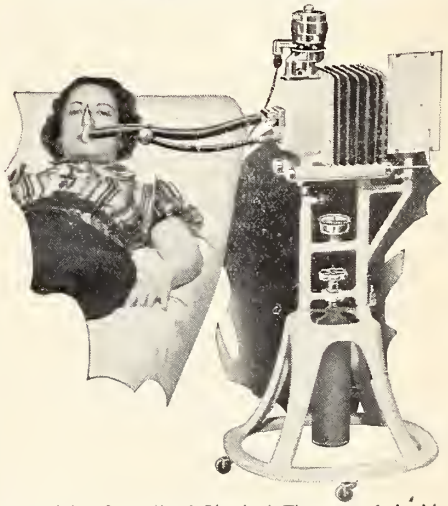
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(Continued from Page xxiii)

MORGAN COUNTY MEDICAL SOCIETY met at the Morgan County Memorial Hospital, October twentieth, to hear Dr. Bert Ellis of Indianapolis discuss "Common Nose and Throat Problems."

* * *

OWEN COUNTY MEDICAL SOCIETY members met at Spencer October fifteenth and officers were elected for the coming year as follows: President, Dr. R. H. Richards, Patricksburg; Secretary-treasurer, Dr. Julia Thom, Gosport.

* * *

RANDOLPH COUNTY MEDICAL SOCIETY met November tenth at the Randolph County Hospital. Speakers were Dr. R. W. Reid, Dr. Russell Engle, Dr. J. S. Robinson, Dr. Wayne Harmon, Dr. I. E. Brenner, and Dr. A. Henderson.

* * *

SHELBY COUNTY MEDICAL SOCIETY held a meeting in Shelbyville, November third. Speakers were Dr. J. A. Davis of Flat Rock and Dr. Rufus Nigh of Shelbyville.

* * *

ST. JOSEPH COUNTY MEDICAL SOCIETY held a meeting in the Jefferson Plaza, South Bend, October twenty-sixth. Dr. C. J. Rudolph of South Bend presented a paper on "Efficiency of the Eyes." Forty-five members were present.

Dr. N. M. Percy of Chicago was the speaker at the November tenth meeting of the St. Joseph County Medical Society at the Hotel LaSalle in South Bend. Dr. Percy's subject was "Appendicitis."

* * *

TIPPECANOE COUNTY MEDICAL SOCIETY met at the William Ross Sanatorium in Lafayette, November ninth, to hear Dr. Henry C. Sweany of Chicago talk on "Pathology of Tuberculosis." Attendance numbered sixty-five.

* * *

TIPTON COUNTY MEDICAL SOCIETY held a meeting at the Elks Club in Tipton, October fifteenth, with Dr. John Brayton of Indianapolis as principal speaker. Dr. Brayton's subject was "Skin Diseases of Childhood and Early Adult Life."

* * *

VIGO COUNTY MEDICAL SOCIETY met at St. Anthony's Hospital in Terre Haute, November ninth, with forty-five in attendance. Dr. J. R. Yung of Terre Haute presented a case of "Thyroid Heart." Dr. O. R. Spigler presented a case "Foreign Body in Head Following Automobile Accident." Drs. Forsyth and Stewart presented a case of "Delayed Nerve Complications Following Mastoidectomy and Treatment."

At the meeting of the Vigo County Medical Society held October twelfth, at the Union Hospital in Terre Haute, Dr. S. R. Combs talked on "Orthostatic Hypotension." Dr. P. J. Bronson presented a case of diabetic gangrene of the hand treated with intermittent hyperemia and allantoin. Dr. A. W. Cavins reported a case of arachnidism.

* * *

WABASH COUNTY MEDICAL SOCIETY members met at the Young Hotel in North Manchester, November third. Dr. A. N. Ferguson of Fort Wayne was the principal speaker. Nineteen members attended.

* * *

WAYNE-UNION COUNTY MEDICAL SOCIETY held its first fall meeting at the Elks County Club in Richmond, October twenty-eighth. Following dinner, the topic "Treatment of Pneumonia" was presented by Dr. R. A. Solomon of Indianapolis. Attendance numbered thirty-eight.

At the November twelfth meeting, held at the Richmond State Hospital, members of the Wayne-Union County Medical Society heard papers by Dr. Mary Wickens on "Senile Psychosis," Dr. T. J. Wilkin on "Manic-Depressive Psychosis," Dr. Paul Love on "Psychosis with Paralysis Agitans," and Dr. E. J. Jones on "Neurosyphilis." Attendance numbered thirty-five.

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Using such methods, investigation has been made to determine the frequency of latent avitaminosis A in representative groups of American adults and children. The results of these researches are of interest to everyone concerned with human nutrition.

First, it has been shown that the incidence of latent avitaminosis A in America is surprisingly high. For example, in one instance (1d) more than one-third of the adult group under investigation displayed evidences of mild vitamin A deficiency; again, from one-fourth to three-fourths of the members of representative groups of children displayed similar manifestations (1b).

Second, it has been found that, in general, subjects exhibiting symptoms of mild avitaminosis A had been maintained on diets which may be considered suboptimal with respect to vitamin A. Last, but by no means least, it appears that these avitaminoses may be corrected and controlled by specific vitamin A therapy; by readjustment of the diet to provide a more liberal supply of vitamin A; or by a combination of these two procedures.

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1a. 1934. J. Amer. Med. Assn. 102, 892.
b. 1936. Ibid. 106, 996.
c. 1937. Ibid. 108, 7 and 15
d. 1937. Ibid. 109, 756.
2. 1931. J. Nutrition 4, 267
1932. Ind. Eng. Chem. 24, 650.
1933. J. Amer. Diet. Assn. 9, 295.
1935. Amer. J. Public Health 25, 1340.

This is the thirty-first in a series of monthly articles, which will summarize, for your convenience, the conclusions about canned foods which authorities in nutritional research have reached. We want to make this series valuable to you, and so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles.

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BOOKS

REVIEWS

THE BUSINESS SIDE OF MEDICAL PRACTICE. By Theodore Wiprud, Executive Secretary of the Medical Society of Milwaukee County and lecturer in medical economics at the Marquette University School of Medicine. Illustrated. 177 pages. Cloth. Price $2.50. W. B. Saunders Company, Philadelphia and London, 1937.

This book is ably prepared by one whose experience qualifies him to write such a book. Realizing the apathy and indifference of most physicians toward business affairs, Mr. Wiprud says that "Relying upon the plea that only scientific knowledge is expected of him is merely evading the responsibility which present conditions have thrust upon the medical profession." Office management, financial records, case records and filing, doctors' bills and the law, investments, wills and estates, the doctor in court, preparation of a manuscript, public speaking, relations with the press, are chapter subjects which are followed by suggestions and discussions that are bound to throw light upon the errors that are certainly present in every physician's office and practice. A list of "do not's" in relation to investments is worthy of framing and placing in a conspicuous place on the desk of every physician who is tempted to dabble in financial ventures of which he knows little. Hundreds of helpful suggestions will be found in this book, and the physician will readily recognize their applicability to his own practice. It is an unusually worthwhile volume and will serve as a reference work for the physician for many years.

TEMPLE UNIVERSITY OBSTETRICAL GUIDE-BOOK. By J. O. Arnold, M.D., F.A.C.S., Professor of Obstetrics, Temple University Medical School. 197 pages, flexible binding. Price $2.50. Corson Publishing Co., Philadelphia, 1937.

This volume of some one hundred and ninety pages, only slightly over pocket size, and representing the first edition, was placed into the reviewer's hands a few weeks ago. The "meatiness" of the first few pages created such an impelling desire to read further that it was only with an unusual reluctance that the urge was interrupted.

The work, presumably adhering closely to the teachings at Temple, is admittedly designed for medical students, internes and general practitioners. However, the choice and presentation of the subject matter afford both thought and inspiration to him engaged in the field of obstetric teaching.

The expressing of each point of instruction in heavy type at the beginning of the paragraph is a desirable feature.

The text deals with the practical throughout, and is characterized by simple, clear and concise statements. The two following quotations are typical examples of the common sense so frequently expressed:

1. "Abdominal binders and pads will not prevent or control postpartum bleeding—should never—take the place of the necessary 'manual observation' of the uterus after labor."

2. "Patients may be fed postpartum as soon as they are hungry—a full tray (as much as the patient wants) may be given at once in most cases."

The remarks covering the proper methods of resuscitation and those condemning the rough-house methods are well taken.

The author sets forth definite reasons for analgesia throughout both the first and second stages of labor, and in the following terms strongly specifies the Modified Gwathmey Technic for general use:

"The unprejudiced testing and weighing of drugs and methods so far developed lead us to the conclusion that all things considered the Modified Gwathmey Course comes nearest to meeting all demands, under the widest range of circumstances, and therefore that is what we shall continue to preach and practice until convinced that there is something better." (More recent modifications omit the quinine, and in some instances during the second stage 2 drachms of paraldehyde is added to the ether-oil mixture.)

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The pages devoted to dystocia, persistent occiput posterior, cesarean, forcep delivery, hyperemesis gravidarium, and hemorrhage represent in each instance commendable practical consideration. What is truer than—"The test of labor is often quite as much "the test of the doctor" as it is an effort to find out whether the baby can be safely born without artificial help?"

The Arnold-Gruskin intradermal test for pregnancy, developed at Temple University, is worthy of special note. The test is stated to show a positive reaction within 8 to 10 minutes. "A simple, inexpensive test that can be applied anywhere, anytime without laboratory or technician." A claimed reliability of 96% among normal pregnancy cases and 92% among differential diagnoses.

The paramount feature of the text is the forty-page discourse represented by Part II upon the fluid-balance and dehydration in the prevention and control of eclampsia—widely known as the Temple Treatment.

The theory given is that the toxemia is the result of excessive water retention in relationship with an endocrine (pituitary?) imbalance or dysfunction. Dehydration is accomplished by any or several of the known methods, depending upon the severity of the case, such as purgation, sweating, blood letting, glucose or magnesium sulphate intravenously, spinal puncture, and low salt and carbohydrate diets.

The author reports the employment of the method over a period of seven years, during which time 101 convulsive and 128 near-convulsive cases were treated. There were six maternal deaths, three of which were not attributable to the method's failure, while the remaining three were those of neglected cases having been long in convulsions.

The results certainly compare most favorably with any of the other recognized present day methods, and should warrant a familiar knowledge of the method.

Casarean section was not done for eclampsia during these seven years.

Part III is taken up chiefly with several well chosen problems—case reports, and their presentation is admirably done.

In the final pages the author's sincere belief in the high position modern obstetrics is destined to hold in the future reduction of human mortality and morbidity is well disclosed in a near-classic challenge of "Obstetrics as a specialty."

In brief, this is the "fullest" obstetrical volume for its size the reviewer has encountered.

BOOKS RECEIVED

CHEMISTRY OF THE BRAIN. By Irvine H. Page, A. B. (Chem.), M.D., Hospital of the Rockefeller Institute for Medical Research, New York. 444 pages; cloth. Price, $7.50. Charles C. Thomas, Springfield, Ill., 1937.

* * *

EYESTRAIN AND CONVERGENCE. By N. A. Stutterheim, M.D. (Rand) part time ophthalmic surgeon to the Johannesburg School Clinic, Transvaal Education Department. 89 pages. Cloth binding. Price 7/6 in Great Britain. H. K. Lewis & Co., Ltd., 136 Gower Street, London, W. C. 1, 1937.

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LOCUM TENENS: General practice. Excellent opportunity. Address Box M-12, c/o THE JOURNAL, 1021 Hume Mansur Building, Indianapolis.

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TWENTY-FIVE YEARS OF HEALTH PROGRESS. A Study of the Mortality Experience Among the Industrial Policyholders of the Metropolitan Life Insurance Company, 1911 to 1935. By Louis I. Dublin, Ph.D., Third Vice-President and Statistician, and Alfred J. Lotka, D.Sc., Assistant Statistician, with the collaboration of the staff of the Statistical Bureau. Published in a limited edition for distribution (complimentarily) to a selected list of libraries and specialists in public health and allied fields. 611 pages. Cloth binding. The Metropolitan Life Insurance Company, New York, 1937.

* * *

THE BUSINESS SIDE OF MEDICAL PRACTICE. By Theodore Wiprud, Executive Secretary of the Medical Society of Milwaukee County, and lecturer in medical economics at the Marquette University School of Medicine. Introduction by Dr. Morris Fishbein. 177 pages. Cloth. Price $2.50. W. B. Saunders Company, Philadelphia and London, 1937.

* * *

DR. COLWELL'S DAILY LOG FOR PHYSICIANS for 1938. A financial record for physicians, dated for the calendar year. For the average practice, $6.00; double size for the large practice, clinics, small hospitals, $11.00. Colwell Publishing Co., Champaign, Illinois.

* * *

CRIPPLED CHILDREN. Their Treatment and Orthopedic Nursing. By Earl D. McBride, B.S., M.D., F.A.C.S., assistant professor of orthopedic surgery, University of Oklahoma, School of Medicine; in collaboration with Winifred R. Sink, A.B., R.N., educational director, Grace Hospital School of Nursing, Detroit, Michigan; formerly head nurse of James Whitcomb Riley Hospital of the Indiana University Medical Center. Second edition. 379 pages, illustrated. Cloth. Price $3.50. C. V. Mosby Company, St. Louis, 1937.

* * *

METHODS OF TREATMENT. By Logan Clendening, M.D., Clinical Professor of Medicine, Medical Department of the University of Kansas. With chapters on special subjects by H. C. Anderson, M.D., Ursulla Brunner, R.N., J. B. Cowherd, M.D., Paul Gempel, M.D., H. P. Kuhn, M.D., Carl O. Rickter, M.D., F. C. Neff, M.D., E. H. Skinner, M.D., E. R. DeWeese, M.D., and O.R. Withers, M.D. Sixth edition. 879 pages, illustrated. Cloth. Price $10. C. V. Mosby Company, St. Louis, 1937.

* * *

FRACTURES, DISLOCATIONS, AND SPRAINS. By John Albert Key, B.S., M.D., St. Louis, clinical professor of orthopedic surgery, Washington University School of Medicine; and H. Earle Conwell, M.D., F.A.C.S., Birmingham, Alabama, consulting orthopedic surgeon to the Tennessee Coal, Iron and Railroad Company, etc. Second edition. 1246 pages with 1222 illustrations. Cloth. Price $12.50. C. V. Mosby Company, St. Louis, 1937.

* * *

MENTAL THERAPY. Studies in Fifty Cases. By Louis S. London, M.D., formerly passed assistant surgeon in the United States Public Health Service; medical officer United States Veterans' Bureau. Two volumes. 774 pages. Cloth. Price $12.50. Sale restricted to physicians, lawyers, ministers, educators and social workers. Covici-Friede, New York, 1937.

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